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Process, perspectives, and benefits of animal assisted therapy

Laurie Christine Paquette

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UNIVERSITY OF NORTHERN COLORADO

Greeley, Colorado

The Graduate School

PROCESS, PERSPECTIVES, AND BENEFITS OF
ANIMAL ASSISTED THERAPY

A Dissertation Defense Submitted in Partial Fulfillment
of the Requirements for the Degree of
Doctor of Philosophy

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Department of Counseling Psychology
Counseling Psychology

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This Dissertation by: Laurie Christine Paquette

Entitled: *Process, Perspectives, and Benefits of Animal Assisted Therapy*

has been approved as meeting the requirement for the Degree of Doctor of Philosophy in
College of Education and Behavioral Sciences, Department of Counseling Psychology

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ABSTRACT

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The purpose of this study was to understand mental health/human services professionals' processes, perspectives, and beliefs about animal assisted therapy. There has been an increase in the use of animals in therapy over the last 40 years. Animals are being used to help clients with a variety of mental and physical problems. In 2007, Division 17 of the American Psychological Association established Section 13, Animal-Human Interaction: Research and Practice, to educate professionals and scholars on understanding animal-human interaction in relation to counseling psychology. Six licensed master's and doctoral level professionals were selected based on their current use of animals in a therapeutic setting.

In this qualitative study, in depth semi-structured interviews were conducted to identify the perspectives, values, and beliefs of participants who believe that utilizing animals in therapy provides value to their clients. Each participant completed two phone interviews which were transcribed and reviewed. The interviews were then analyzed, both within-case and cross-case. The within-case analysis revealed each participant's history with animals, their values and beliefs about the benefits that animals provide, as well as their individual perspectives and paths on integrating animals into their therapeutic environment.

The cross-case analysis was conducted by an analysis of the themes that were initially generated after review of the interviews. The cross-case analysis yielded five themes that were consistent among at least four or more of the participants. The themes that emerged were animal characteristics, use of metaphors/learning tools, written documentation, therapeutic factors in AAT, and benefits for clients. The participants believed that the animals should be well trained and interact positively with the clients. The participants utilized the animals in a number of different capacities, but many of them used the animals as a metaphor or learning tool to help the client gain greater insight and understanding into their problems. The participants documented the use of the animal in sessions in their clinical notes; the degree to which they documented depended on the intervention the animal was used for. The participants described several key therapeutic factors that the animals provided that helped make the intervention successful, such as the animals' ability to decrease the client's anxiety level, and provide the client with unconditional acceptance. Finally, the participants described numerous examples of how and why they felt the animals helped the therapeutic relationship, and assisted the clients in achieving their treatment plan goals.

Further research is necessary to continue to gain a better understanding of professionals' process on integrating animals into the therapeutic environment. There needs to be a standardized system for education, training, and certification for professionals on the integration and use of animals in a therapeutic environment. Finally, more research is needed on how to document the use and effectiveness of an animal intervention.

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I would like to thank my committee members for their support and guidance through this process--Dr. Softas-Nall, Dr. Johnson, Dr. Helm, and Dr. Leners for their interest in animal assisted therapy and helping me pursue a professional passion.

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CHAPTER I

INTRODUCTION

Professionals in the mental health/human services field have always looked for new, innovative ways to help clients meet their treatment goals. For example, a psychologist may utilize a new test to help identify levels of depression in patients, or a couples and family therapist may utilize a new drawing technique to increase family communication. One such innovative method is the use of animals to help facilitate an empathetic and positive treatment environment. This type of environment may help clients feel safe enough to explore their problems and work toward change. Animals can also be used to increase social skills, understand a person's eating disorders, and decrease anxiety levels. Although the use of animals in therapy is becoming a more accepted part of treatment, there still is much to discover about the benefits, drawbacks, and integration of animals into counseling. Most research on animal assisted therapy has focused on anecdotal accounts and the physiological benefits. To date, no research has explored the mental health/human service professionals' perspectives on the process and benefits of animal assisted therapy (AAT).

Animals have been a part of humans' lives for thousands of years. As early as 6300 B.C., Palestine natives started domesticating dogs by feeding them scrapes of food. Ancient Egyptians held cats in high regard and buried them in sacred vaults (Levinson, 1997). One of the first documented uses of animals helping sick people was in 1792

when the York Retreat in England used small animals, rabbits, and poultry, to help patients learn skills such as self-control and caring (Schweitzer, Buxbaum, & Rosen, 2000). In 1859, Florence Nightingale wrote about the benefits of animals helping soldiers recuperate from war injuries. In 1944-1945, the Army Air Force Convalescent Center in Pawling, New York documented the first known use of animals in the United States with recovering veterans, who interacted with the animals to help create a diversion from their intensive physical therapy sessions (Wilson, Netting, & New, 1987).

Dr. Boris Levinson, considered by many to be the father of AAT, presented a paper describing “pet therapy” to his colleagues at the 1961 American Psychological Association Conference. Levinson reported accidentally discovering the potential benefits of incorporating pets in therapy when his dog, Jingles, greeted a new client by jumping up and licking the child’s face. The client had numerous past failed therapy interventions, yet within several sessions with Dr. Levinson and his dog, the child started to open up and share his feelings. It took Dr. Levinson eight years to be secure enough in his professional achievements to present his unorthodox findings to a group of his peers (Levinson, 1997). In the early 1970s, Dr. Levinson and his colleagues surveyed psychotherapists in the Clinical Division of the New York State Psychological Association, and of those randomly selected 33% reported the use of pets as therapeutic aides, of which 91% reported them to be useful (Levinson, 1972). Levinson encouraged his colleagues who used AAT to continue to document the beneficial effects of using animals in therapy.

The medical field is one of the leading professions in which researchers have studied the impact of using animals with recovering patients. In 1980, Public Health

Reports published a study on the one-year survival rate of patients discharged from a coronary care unit, showing that the pet owners' survival rate was much higher than non-pet owners (Friedmann, Katcher, Lynch, & Thomas, 1980). This remarkable study led the way to investigating the impact of animals with other medical concerns such as cancer (Johnson, Meadows, Haubner, & Sevedge, 2003), spinal cord injuries (Roberto, 2002), and cerebral palsy (Liptak, 2005). The benefits of using animals have also been documented by occupational therapists (Velde, Cipriani, & Fisher, 2005), as well as hospice workers (Chinner & Dalziel, 1991).

A review of the literature suggested that research is being conducted on how the use of animals in treatment is affecting specific mental health disorders, such as autism (Redefer & Goodman, 1989) and depression (Folse, Minder, Aycock, & Santana, 1994). Other areas of research have focused on personality and emotional development (Levinson, 1978; Triebenbacher, 1998), and the impact of animals in childhood (Melson, 2003). Animal interventions have been shown to alleviate stress symptoms (Allen, Blascovich, Tomaka, & Kelse, 1991), and help with bereavement (Levinson, 1967).

Although there has been an increase in publications regarding the impact of animals on specific mental health areas, there is still limited information regarding the details of how professionals implement the use of animals into their therapeutic practice. More research is needed on how the animals are utilized in the therapeutic environment, as well as the disorders and developmental concerns for which AAT is effective. In the next section, I will discuss several organizations that have been instrumental in furthering animal assisted therapy education, research, and practical implications.

Professional Animal Assisted Therapy Organizations

The leading international non-profit organization for promoting the human-animal bond is Delta Society. Founded in 1977, Delta Society's mission is to improve the health of individuals utilizing service and therapy animals. Two main goals of Delta Society are to increase awareness of the positive effects of animals on human health and development, and to expand the use of therapeutic interventions with animals in human health, human service, and animal education. Delta Society is at the forefront of providing professionals and lay people information about the benefits of animals in human lives. In 1987, they established the first scientific journal on human-animal interactions (now called Anthrozoos). Anthrozoos provides current and future professionals with valuable research regarding the benefits of animals in the mental health/human services professions (Delta Society, 2006).

In 1990, a Pet Partners® program was established to promote human health and well-being through animal assisted activities (AAA). The Pet Partners® program trained volunteers and their animals to meet specific criteria (pass training course, health screening, and team evaluation) to deliver AAA in a variety of environments. This program provides a national registry that requires volunteer training and screening of humans and their pets before they can provide AAA and AAT services in the community. Today, over 8,800 Pet Partners® program volunteers and their pets, provide more than 900,000 hours of community service annually to their local hospitals, nursing homes, schools and rehabilitation centers (Delta Society, 2006). Delta Society defines AAA as providing opportunities for motivational, educational, recreational, and/or therapeutic benefits to enhance human quality of life. Although dogs and cats are the most common

registered pets of AAA, other pets include horses, rabbits, guinea pigs, llamas, goats, donkeys, potbellied pigs, cockatoos, African gray parrots, and chickens (Delta Society, 2006). In 1992, Delta Society published Standards of Practice in Animal Assisted Activities and Animal Assisted Therapy in order to facilitate a more unified standard for the use of animals, either as volunteers or for a specific treatment goal. Although any trained human/animal team may become a part of the Pet Partners® program, only a mental health/human service professional practicing within their field of expertise may become an animal assisted therapist. A key requirement of becoming an animal assisted therapist is that there is a specific goal and objective for each individual receiving services, and progress towards a measurable goal. Delta Society defines AAT:

A goal directed intervention in which an animal that meets specific criteria is an integral part of the treatment process. AAT is directed and/or delivered by a health/human service professional with specialized expertise, and within the scope of practice of his/her professions. AAT is designed to promote improvement in human physical, social, emotional, and/or cognitive functioning. AAT is provided in a variety of settings and may be group or individual in nature. This process is documented and evaluated. (Delta Society, 2006)

An animal will meet specific criteria if it passes three of Delta Society's requirements, which include a health screening by the animal's veterinarian, a Team Evaluation Skills Exercise Test (PPST), and a Team Evaluation Aptitude Exercises Test (PPAT). Both team evaluations were developed as a screening tool for participation in the Pet Partners® Program. The Pet Partners® Program trains volunteers and their pets to visit individuals in various facilities. Each mental health/human service professional must meet specialized expertise requirements, and Delta Society states that each individual must utilize their animal within the scope of their profession in order for it to be considered AAT. Animal assisted therapy can be utilized in a number of different

professional disciplines such as physical therapy, speech/language pathology, mental health counseling, school counseling, and psychology.

In 1999, the Equine Assisted Growth and Learning Association (EAGALA) was founded to develop resources and education in Equine Assisted Psychotherapy (EAP) and Equine Assisted Learning (EAL). EAGALA provides certification in EAP, mentoring, workshops, and is proactive in researching the effectiveness of utilizing horses in the mental health field. This international organization has over 3,500 members in 35 countries. Although it is smaller than Delta Society, it is one of the leading organizations dedicated to the use of horses in promoting mental health wellness for individuals. EAGALA has a two level certification process that requires a licensed mental health professional, and a horse professional, to work together with a horse, and provide a brief experiential therapeutic intervention. This non-riding program provides the participants an opportunity to learn about themselves while engaging in activities with the horses, and then to process their feelings and behaviors (EAGALA, 1999).

Delta Society and EAGALA are two well-known organizations that have developed trainings, certifications, and guidelines on how to utilize animals to promote a human's emotional and physical well-being. In 2007, the American Psychological Association, Division 17, Counseling Psychology, added Section 13: Animal-Human Interaction: Research and Practice, to educate professionals and scholars on understanding animal-human interaction in relation to counseling psychology. They focus on four main areas, including the human-animal bond, animal assisted interventions in a therapeutic capacity, violence prevention as it relates to the link with animal abuse, and training topics on a variety of animal related issues (American Psychological

Association, 2007). A number of the Section 13 members have published books on animal assisted interventions, conducted research on specific interventions, and anecdotal stories. With just over 140 total members (as of May 2009), Section 13 helps educate, train, and disseminate of materials on the importance of animal interventions and its effectiveness to colleagues.

Benefits and Concerns of Animal Assisted Therapy

There are a number of benefits of incorporating animals into therapy for clients of all ages, with different problems, including physical, mental health, educational, physiological, and motivational (e.g., interaction with others, exercise) concerns. Benefits may also include an increase in empathy, rapport, nurturance, and physical contact. Research has focused on the use of AAT children who suffer from a variety of emotional and behavioral problems such as; anger, attention deficit, and poor social skills. A number of research studies have demonstrated the effectiveness of utilizing animals with older adults who have experienced strokes or are living with dementia and Alzheimer's. AAT has been researched with adults who struggle with schizophrenia and other serious mental health problems. Prisoners can struggle with isolation from limited contact with the outside world and have benefitted from contact with animals and participation in animal training and rehabilitation programs.

Practitioners have started to focus on the utilization of animal assisted therapy within specific approaches. In 2007, *Animal Assisted Brief Therapy: A Solution-Focused Approach* was published and it addressed how to combine AAT with a Solution-Focused theoretical approach to counseling. In 2008, *Play Therapy with Kids & Canines: Benefits*

for Children's Developmental and Psychosocial Health was published and addressed how to incorporate animals while working with children from a play therapy approach.

However, AAT may not be beneficial for certain individuals, institutions, or animals. Individuals who are allergic to animals, have asthma, or are fearful of animals, should not participate in AAT. Individuals with brain injury, developmental disabilities, or senility may provoke an animal without realizing it. Some individuals may view animals differently because of their cultural backgrounds. Institutions that are not willing to invest in appropriate training, orientation and understanding of AAT should not utilize animals. Other factors to consider include legal ramifications for accidents or injuries to animal, handler, patient, or staff, cost of implementing an AAT program, and sanitation, disease, or other environmental concerns. AAT should not be used with animals that appear not to enjoy this type of interaction, or if the animal's welfare cannot be secured, and there is a high probability of the animal being injured (Fine, 2000).

Fear of zoonosis is common among individuals who may be unfamiliar with the visiting animal and handler. Zoonosis is a disease that can be transmitted from an animal to a human. Zoonosis is easily preventable by making sure the animal is current on all appropriate immunizations, and has passed a general physical exam by their veterinarian. Animals should be groomed prior to any AAA or AAT activity, which will help decrease any chance of transmitting disease via physical contact. Documentation of current immunizations and exams should be kept readily available for those individuals concerned about diseases.

Ethical treatment of animals is a concern among professionals and pet owners. In the Handbook on Animal-Assisted Therapy: Theoretical Foundations and Guidelines for

Practice (Fine, 2000), there are five basic ethical principles for therapy animals: Animals must be kept from abuse, discomfort, and distress, both physically and mentally; they must receive proper health care at all times; they should have a quiet place to retreat from work activities; the animals' interactions with clients must be structured so they can serve as a useful therapeutic agent; and situations of animal abuse should never be allowed unless it is necessary to avoid human abuse of a client (Fine, 2000). In order for the animal to be most effective in a therapeutic environment, these ethical guidelines must be followed to prevent animal abuse.

Statement of the Problem

AAT is becoming a more widely used intervention in therapy, as can be seen by the development and growth of different organizations that promote a human's well-being through interacting with an animal. With over 12,000 members in Delta Society and EAGALA alone, it is important that the field of psychology continue to move towards researching more evidence based studies and fewer anecdotal stories. Both Delta Society and EAGALA have developed clear Mission and Visions along with Codes of Ethics that help members identify the appropriate and proper implementation of the use of animals in a therapeutic setting.

In the *Handbook on Animal-Assisted Therapy* by Aubrey Fine (2000), numerous chapters focused on the human-animal bond, selection criteria of animals, program evaluation, special populations, and ethical considerations. There is minimal information on the mental health/human service professionals' perspectives and how they have integrated the use of animals in therapy. Many studies have documented the effects of AAT, but no studies have focused on the mental health/human service professionals'

perspectives on how they incorporated animals into their therapy and the benefits of AAT for their clients (Banks, & Banks, 2002; Bardill, & Hutchinson, 1997; Jessen, Cardiello, & Baun, 1996; Lloyd, 1997). The current research is lacking the depth and understanding of a professional's journey into incorporating AAT into their practice, the perceived benefits and drawbacks of AAT for the clients, and documentation of the impact of AAT in a therapeutic relationship.

The purpose of this study was to explore perspectives of professionals in the mental health field who utilize animals when working with clients. Although there have been numerous articles exploring the benefits of AAT for specific populations, within specific settings, or for a variety of mental health and other problems. To date, there have been no in-depth investigation into the perspectives of the professionals who practiced out in the community, and provided AAT to their clients. Taking an in-depth look at these professionals' perspectives, may provide others who desire to utilize AAT a better understanding and guideline on how to integrate animals into their therapy practice.

This study examined the participants' history with animals, their values and beliefs about the benefits of animals in humans' lives, their perspectives on the benefits of AAT for their clients, identified the important components of AAT; and described their thoughts on the future direction of AAT in their therapeutic practice. The exploration of different mental health/human service professionals' perspectives were conducted through qualitative methods, using in-depth interviewing of professionals who have utilized, AAT within the past 12 months.

Need for the Study

The use of animals in a therapeutic setting is increasing in the mental health/human services field. There is limited research exploring professionals' perspectives of incorporating animals into their therapeutic practice and the benefits of doing so. This qualitative study explored current mental health/human service professionals' perspectives, their values and beliefs about AAT, the process of becoming an animal assisted therapist, and clients' benefits when using AAT. Currently, there is a need to discover what factors led professionals to incorporate animals into therapy, how they determined the benefits of AAT, and how they documented these benefits. Most research shows AAT has positive results when used with specific populations for the treatment of mental health disorders, behavioral problems, and physical disabilities. The mental health/human service professionals' process of integrating animals into their therapeutic practice and its benefits has not been investigated.

There are still many unanswered questions regarding AAT especially when trying to distinguish it from animal assisted activity. Although there are numerous benefits of having animals present in humans' lives, there is a difference between an animal's presence and an animal used to accomplish a treatment goal (Arkow, 1987; Chandler, 2005; Fine, 2000; Serpell, 1986). Delta Society has distinguished animal assisted activity (AAA) from AAT by defining AAA as follows (Delta Society, 2006):

AAA provides opportunities for motivational, educational, recreational, and/or therapeutic benefits to enhance quality of life. AAA is delivered in a variety of environments by specially trained professionals, paraprofessionals, and/or volunteers, in association of animals that meet specific criteria.

The main difference between AAA and AAT is that animal assisted therapy must be used by professionals within the scope of their expertise/practice (e.g., a marriage and

family therapist would use an animal to help a parent and child increase their communication skills).

Overview of the Study

In qualitative research, a fundamental method for researchers to gather important information is through in-depth interviewing. In-depth interviewing is a qualitative data collection method with the purpose of describing the meaning of a small group of individuals who have experienced a similar phenomenon (Creswell, 1998). It offers the ability to converse directly with individuals to explore perspectives, memories, values, and beliefs. This researcher interviewed licensed mental health/human service professionals who have used animals in therapeutic sessions for a minimum of one year.

Two in-depth interviews were scheduled for each participant, approximately 60-90 minutes each. If there were follow up questions, a third interview was completed, lasting no longer than 30 minutes. Interviews were transcribed, and then NVIVO 8, a qualitative computer software program, was used to code and analyze the data. Once the interviews were coded, the researcher was able to analyze the codes and identify themes within the data. The software program NVIVO 8 kept a record of all coded information; including initial codes, emerging and final themes.

Participants were informed that pseudonyms were used and the information they share was coded to assure confidentiality. Participants were informed that they had the right to stop participating in the study at any time and for any reason.

Research Question

The purpose of this study was to identify perspectives on AAT from mental health/human service professionals who were currently working in their specialized field

of expertise (e.g. licensed psychologist, licensed clinical social worker, licensed marriage and family therapist, licensed mental health counselor, and/or licensed professional counselors).

The following research question was addressed in this study:

Q1 What are the processes, perspectives, and beliefs about utilizing animals in a therapeutic environment from human service/mental health professionals?

The following guiding questions were used to direct the data collection processes:

Q1a What are the participants' values and beliefs about animals?

Q1b What are the participants' perspectives on the benefits of animal assisted therapy?

Q1c What are the important components of animal assisted therapy?

Q1d What are the benefits for clients who participate in animal assisted therapy?

Q1e What will animal assisted therapy look like in the future?

Potential Threats to Research Quality

Qualitative research is based on the premise that

all observations and analysis are filtered through [a] human being's worldview, values, and perspectives... the researcher thus brings a construction of reality to the research situation, which interacts with other people's construction or interpretations of the phenomenon being studied. (Merriam, 1998, pp. 22-23)

As the researcher, I asked questions based on my worldview, values, and perspectives about animals and their therapeutic use. Each participant answered questions based on their current worldview, values, perspectives, and history regarding animals and their therapeutic value in their professional setting.

Creswell (1998) emphasized several characteristics of a good qualitative study. If these characteristics are not achieved, they are potential limitations to the study. First,

qualitative research is designed to understand a single focus or idea. For the purpose of this study, the focus is on mental health/human services professionals' perspectives on integrating animals into a therapeutic relationship with their clients. This focus on AAT was achieved and therefore was not a limitation. Second, rigorous data collection procedures must be maintained throughout the study. This includes multiple forms of data collection, adequate summarization of findings, and spending time in the field with participants. This study was limited in the ability to achieve rigorous data collection procedures because it was conducted over the phone only. There were not any field observations because some participants were out of state. However, since multiple participants participated in the in-depth interview process, an adequate summarization of the findings was achieved. Third, qualitative research must be presented with the assumptions and characteristics of a qualitative approach to research. This would include understanding and documenting the researcher as a key instrument in the interview process, adequately describing the realities and perceptions of the researcher and the participants, focusing on the process of the interviews, and on the evolving themes as they emerge. Documentation and description of the realities and perceptions of the researcher and participants was achieved in this study (Creswell, 1998).

A limited number of participants were interviewed; therefore, it cannot be assumed that the findings in this study are transferable to other mental health/human service professionals utilizing animals in therapy. Providing a "thick description" might assist the reader in deciding what similarities exist between themselves and the participants, and will provide them with a context for understanding how animals are used in a therapeutic environment. "Thick description" is a description of an event,

action or experience with sufficient detail to allow meaningful interpretation (Denzin, 1989). The goal of a “thick description” is to allow the participants to speak in their own voices.

Questions for the interviews were prepared specifically for this study. In this study, the researcher’s bias cannot be guaranteed to be absent. In order to keep my bias to a minimum, I wrote journal entries after each interview session. This included my emotional reactions, observations, and perspectives on participants. Journaling after each interview helped this researcher keep track of personal thoughts, emerging themes and follow up questions. The journal should be considered another source of information to enrich the thick description and conceptualization.

Another limitation involved the participants’ recollection of past memories and feelings. This form of data gathering is subject to memory distortion. It is assumed that each participant had some memory distortion of past events, however, this cannot be identified in this study because it was a subjective experience of the participants. Lastly, due to the confidentiality of the participants’ clients, it was not possible to observe AAT as it was occurring. This limited the ability to gain the clients’ perspectives on the benefits of animal assisted therapy and whether or not they were experiencing similar events as the participants.

Assumptions

A primary assumption was that the participants would be willing to share their experiences as honestly and clearly as they could. The three interviews allowed the researcher to attempt to develop an open, comfortable level of communication with each participant. Open-ended questions were used to help avoid any feelings of interrogation,

and to provide this researcher with an opportunity to ask follow up questions based on the answers from the participants. A theme emerged when participants responded to the guided questions in a similar manner. When multiple participants responded in a similar manner, the data reached saturation.

In research, the biases and preconceived notions of the researcher are an important component to understand and be embraced (Taylor & Bogdan, 1998). The researcher explored her own biases regarding AAT throughout the study. Member and expert checks, researcher journal, and within-case and cross-case analysis were utilized to increase the trustworthiness of the study. In addition, the researcher took the time to answer any questions from the participants, develop rapport prior to and during interviews, and discuss confidentiality of all material. With increased trustworthiness and triangulation, it is believed the researchers biases have been accounted for.

Summary

There has been a recent increase and exposure of the use of different animals in a therapeutic environment to promote the health and well-being of humans. This necessitates a more rigorous look at how professionals are effectively integrating animals into their practice. While it is important to continue to educate and train on the therapeutic uses of animals, it is also important to gain a deeper understanding of how professionals are documenting the efficacy of this intervention. More and more professionals are utilizing animals in a variety of professional settings; however, current research is not investigating the details of this integration. This study addresses the need within the field of professional psychology for research that focuses on the integration of

animals into a therapeutic environment, and the professionals' values and beliefs about animals and animal assisted therapy.

Definitions

Animal assisted activity (AAA). AAA provides opportunities for motivational, educational, recreational, and/or therapeutic benefits to enhance quality of life. AAA is delivered in a variety of environments by specially trained professionals, paraprofessionals, and/or volunteers, in association with animals that meet specific criteria (Delta Society, 2006).

Animal assisted therapy (AAT).

A goal directed intervention in which an animal that meets specific criteria is an integral part of the treatment process. AAT is directed and/or delivered by a health/human service professional with specialized expertise, and within the scope of practice of his/her professions. AAT is designed to promote improvement in human physical, social, emotional, and/or cognitive functioning. AAT is provided in a variety of settings and may be group or individual in nature. This process is documented and evaluated. (Delta Society, 2006)

Delta Society. A non-profit organization to promote the human-animal bond. This organization is also responsible for increasing the awareness of the benefits of using animals, and training human/animal teams for participation in animal assisted activity, or animal assisted therapy programs (Delta Society, 2006)

Equine Assisted Growth and Learning Association (EAGALA). A non-profit organization to promote mental health wellness for individuals in a brief experiential modality with the use of horses. It consists of a licensed professional, a horse handler, and horse(s) in a non-riding intervention.

Equine facilitated therapy (EFT). The use of horses (no riding) to work with identified populations or problems to achieve a predetermined treatment goal. The

treatment goals are developed by a mental health/human service professional who is familiar with the population or problem identified for therapy. EFT is designed to promote improvement in a human's physical, social, emotional, and/or cognitive functioning. Horses must be used within their habitats, such as a stable or pasture.

Mental health/human service professional. A professional currently working in the mental health field, who currently holds a license in their respective field. This type of professional may be a licensed psychologist, licensed marriage and family therapist, licensed professional counselor, or licensed clinical social worker.

In-depth interviewing. A qualitative research method requiring multiple face-to-face, phone, or a combination of the two, meetings with participants to understand their perspectives on their lives, experiences, or situations as expressed in their own words (Taylor & Bogdan, 1998).

NVIVO8. A computer software program designed to manage qualitative data, which have been coded and categorized. In addition to storage and retrieval, the system allows the researcher to look at the relationship between frequently recurring themes, using its multiple indexing system.

Pet Partners® Program. A non-profit program within Delta Society that trains an animal and its handler to conduct animal assisted activity within designated community organizations.

Semi-structured interviews. In qualitative research, it is a way of eliciting in-depth answers about an individual's culture, meanings, processes, and problems. Semi-structured interviews use the technique of guiding discussions by asking specific, open

questions, to which the interviewee is encouraged to develop and expand their answers fully (Rubin & Rubin, 1995).

CHAPTER II

LITERATURE REVIEW

The literature review was organized into four main sections, and begins with the human-animal bond and its benefits within a therapeutic relationship. Second, types of settings were explored where animal assisted therapy (AAT) and animal assisted activities (AAA) can be utilized. These include hospitals, long-term care facilities/nursing homes, mental health centers, residential facilities for children and adolescents, schools, and other setting, such as homes, and rehabilitation centers. In the third section the types of animals used for AAT and AAA are discussed, including dogs, horses, dolphins, birds, cats, and others, such as aquariums, and farm animals. Finally, the types of problems AAT and AAA can be used for are addressed, such as mental health concerns, Alzheimer's, psychotic disorders, mood disorders, cognitive concerns, and physical concerns.

Human-Animal Bond

The human-animal bond is a multifaceted relationship, which plays a crucial role in AAA and AAT. Pets have shown physiological, psychological, and social benefits for different populations (Beck & Katcher, 1996; Cusack, 1988; Cusack & Smith, 1984; Fine, 2000; Wilson & Turner, 1998). A few of the most common physiological benefits of pets are the ability to help their owners recover from illnesses, such as heart disease (Friedmann, Katcher, Lynch, & Thomas, 1980), reduction of blood pressure (Barker,

Rasmussen, & Best, 2003), reduction in symptoms of depression, anxiety, and loneliness (Schwartz & Patronek, 2002; Zasloff & Kidd, 1994), as well as the ability to better cope with cancer (Johnson, Meadows, Haubner, & Sevedge, 2003; Muschel, 1984).

Pets appear to provide many psychological benefits to their owners, such as companionship, unconditional love and affection, intimacy, safety and security, humor, and a nonjudgmental relationship (Beck & Katcher, 1996; Cusack & Smith, 1984; Wilson & Turner, 1998). Most human-human relationships which have these benefits are dependent on peoples' willingness to offer them to each other. An animal will provide these benefits to a human unconditionally (Beck & Katcher, 1996). Pets provide social benefits for their owners because they promote interaction with others, and strangers perceive pet owners, especially dog owners, as more friendly and safer than non-pet owners (Katcher & Beck, 1983). As more studies are conducted regarding the relationship between owners and their pets, more benefits should be identified. Two negative aspects of pet ownership include financial obligations and the experience of bereavement when a pet dies.

In AAT, the human-animal bond is initially between the professional and their animal (pet). When the professional brings their animal into therapy to use as a tool with clients, the animal is able to provide these same benefits to the clients. This is due to the reciprocal relationship between a human and animal (Katcher & Beck, 1983; Levinson, 1972). The human-animal bond is an essential component to help facilitate AAT as an effective intervention to use in the mental health/human services professions. Without this bond, AAT would not be as effective when working with the various clients and mental health problems. Walsh (2010) reported on the benefits of the human-animal bond

when utilizing an animal in family therapy. The author noted that animal assisted therapy can provide the family with an enriching experience and promote healing within the family system.

Types of Settings

Animal assisted therapy (AAT) has been implemented and documented in a number of different settings. Hospitals, nursing homes, rehabilitation centers, schools, prisons, mental health centers, and residential facilities have welcomed AAT as part of a therapeutic program. Several studies focused on the use of animals in settings such as a dentist's office, and in business environments. Two types of AAT requiring a specific setting due to the nature of the animals are equine facilitated therapy (EFT), and dolphin assisted therapy (DAT). EFT requires the use of horses to help facilitate therapeutic change, and must occur in the horses' environment, such as the stables or pasture. DAT must occur in an oceanarium, an enclosed salt-water environment where the dolphins live.

Hospitals

A University medical center in California estimated the benefits of AAT to have reached over 450 patients within a three-year period (Strickland, 1991). The researcher went on to report that animals visited different types of patients, including a patient recovering from a stroke who reported "a dog doesn't care if I can use only one side of my face or can't use one side of my body, the animals can give unbiased affection" (p. 47). The implication for this patient, and for future recipients of AAT, is that the animals provide unconditional acceptance, positive interaction, and an increase in socialization among staff and patients.

In 1994, a hospital in California implemented an AAT program for heart-transplant patients called “Canine Candy Striper,” where dogs would visit patients who were waiting for a transplant. The program was so successful it expanded to 26 out of 34 of the hospitals inpatient units, thus giving more than 17,000 patients the benefit of canine visits (Roosevelt, 2001). An AAT team, Malayter and Murphy, who regularly visited a hospital in Wisconsin, reported Murphy, a Golden Labrador retriever, had been instrumental in helping a patient accomplish her goal of walking with a walker. “Murphy can get people to do things they don’t feel they’re able to because their focus is on the dog” (Peterson, 1999, p. 47). These examples show the numerous benefits of AAT, and the ability to help thousands of people with different illnesses or medical problems.

One study focused on the effectiveness of using caged birds with inpatient adults in a hospital. The researchers reported the birds alleviated some of the depressive symptoms in the older adults; these patients stated the birds were good company, helped them pass the time, increased the number of visitors to their room, and made them happier (Jessen, Cardiello, & Baun, 1996). It appeared dogs and birds were effective in decreasing symptoms of patients in a hospital setting. A study assessed whether or not an AAT group, when compared to other therapy groups, could be effective in attracting participation from the more isolated patients (Holcomb & Meacham, 1989). The researchers found the AAT group was effective in attracting isolated patients, as well as attracting more patients overall in comparison to other therapy groups offered on the ward.

Table 1 provides a summary of studies utilizing dogs in a hospital setting with adults and children. Several studies focused on the use of AAT for adults diagnosed with

Schizophrenia, and found AAT to be an effective intervention (Barak, Savorai, Mavashev, & Beni, 2001; Kovacs, Kis, Rozsa, & Rozsa, 2004; Nathans-Barel, Feldman, Berger, Modal, & Silver, 2005). Two studies found that dogs reduced the anxiety symptoms of patients who utilized inpatient psychiatry services (Barker & Dawson, 1998), and those adults receiving electroconvulsive therapy (Barker, Pandurangi, & Best, 2003). The studies involving children focused on pain relief (Braun, Stangler, Narveson, & Pettingell, 2009), emotional health (Kaminski, Pellino, & Wish, 2002), and stress reduction (Wu, Niedra, Pendergast, McCrindle, 2002).

Table 1

Summary of Studies Showing Effects of AAT in Hospital Settings

<u>Study</u>	<u>Design</u>	<u>Findings</u>
<u>Adults</u>		
Barak et al., 2001	4 hours a week 12 months	Enhanced socialization, Adaptive Daily living skills, & well-being
Barker & Dawson, 1998	30 minutes group format	Patient with mood and psychotic disorders had significant decrease in anxiety
Barker et al., 2003	15-minute session Treatment	Significant decrease 2003
Cole et al., 2007	12 minute session	Improvement in heart function pressures, neurohormone levels, and anxiety in patients with heart failure
Kovacs et al., 2004	1 Hour/week group therapy	Independent living Skills positively changed, significant increase in Domestic & health activities
Nathans-Barel et al., 2005	10 weekly sessions	Significant improvement in hedonic tone, some improvement in use of leisure time and motivation
<u>Children</u>		
Bardill & Hutchinson, 1997	Dog present on unit 24 hours a day	Positive responses to dog being present
Braun, et al., 2009	20 minute session	Four times greater pain reduction than control group
Kaminski et al., 2002	individual, weekly AAT session	Decrease in comments about illness or wanting to be discharged from hospital
Wu et al, 2002	20-minute session	Relieved stress, normalized hospital milieu Improved morale

Long Term Care Facilities and Nursing Homes

Two studies focused on the difference between using a live animal versus an inanimate object, such as a stuffed animal or a photograph. One study examined whether a female Alzheimer's patient would increase her communication when presented with a live animal versus a stuffed animal (Curtright & Turner, 2002). The researchers found only a minimal increase in communication, and could not determine whether it was due to the presence of a live animal, or was a random increase in verbalizations. The second study focused on whether Alzheimer's patient's communication increased when a live puppy was present versus a photograph of a puppy (Taylor, Maser, Yee, & Gonzalez, 1993). The researchers found no difference in communication when residents were presented with a live puppy versus a photograph. More research may help determine if the presence of a live animal can be beneficial in increasing the communication of patients.

A common problem with Alzheimer's patients is the loss of weight due to excessive agitation, which leads to wandering the unit and having a decreased attention span. A study in a long-term care facility utilized a fish aquarium to help patients stay in the cafeteria area longer, and to sustain their interest in eating more food. The researchers discovered most of the patients increased their food intake to the point that the majority gained a pound or two of weight at the end of the sixteen week study period (Edwards & Beck, 2002). The increase in the patient's food intake helped decrease the amount of nutritional supplements and money that the facility spent to provide patients with enough daily caloric intake.

One facility used a resident dog to help decrease Alzheimer's patients' behaviors, such as noncompliance and arguing. It appeared the dog gave the patients a positive way to interact, instead of arguing with others. The positive benefits of the live in dog were only beneficial during the day; the nighttime non-compliance remained consistent. The authors suggested the nighttime behaviors remained the same because the dog was less interactive with the patients, and spent more time in his room away from the residents (McCabe, Baun, Speich, & Agrawal, 2002).

One long-term care facility focused on the use of AAT with cancer patients, and found the patients created relationships with animals that contributed to the patient's sense of well-being (Muschel, 1984). The cancer patients presented with more positive personal characteristics such as warmth, humor, empathy, and creativity than other patients did. This study shows the benefits of using AAT when working with cancer patients. More research is needed which explores the benefits of AAT when working with this population.

Several studies found mixed results when identifying the effects of using a toy or robotic animal instead of a live animal. A study using a robotic cat with patients diagnosed with dementia showed slightly positive results. The patients showed greater amounts of pleasure, and less agitation when the robotic cat was present (Libin & Cohen-Mansfield, 2004). In one study there was minimal change in the emotional state when a robotic dog was presented to a patient with dementia (Tamura et al., 2004). The two studies above suggest the need for more research regarding robotic animals and their effectiveness when working within long-term care facilities.

Table 2 provides a summary of AAT interventions with adults who reside in nursing homes/long term care facilities due to Alzheimer's or dementia. The focus on patients with Alzheimer's and the effects of AAT is due to the significant number of behavioral, psychological, and nutritional problems the patients develop as the disease progresses, which can impact their overall functioning level. Some long-term care facilities have documented the effectiveness of AAT (Banks & Banks, 2002; Kawamura, Niiyama, & Niiyama, 2007; Lutwack-Bloom, Wijewickrama, & Smith, 2005; Motomura, Yagi, & Ohyama, 2004; Sellers 2005), while others have focused on the effect of AAT regarding Alzheimer's patients' behaviors and interactions (Kramer, Friedmann, & Bernstein, 2009; Richeson, 2003; Katsinas, 2000; Bernstein, Friedmann, & Malaspina, 2000).

Table 2

Summary of Studies Showing Effects of AAT in Long Term Care/Nursing Homes

<u>Study</u>	<u>Design</u>	<u>Findings</u>
<u>Alzheimer's/ Dementia</u>		
Banks & Banks, 2002	3 times per week or 1 time per week	significant reduction in loneliness
Berstein et al., 2000	1 to 2 hours 10 weeks total	increase in conversation, touch
Katsinas, 2000	2 days per week Dog present on unit	increase socialization among residents better orientation to days of week
Kawamura et al., 2007	2 times per month 30 minutes	increase in spatial orientation, motor coordination, wakefulness
Kramer et al., 2009	1 visit	increase social interaction, conversation, touches, and looks
Lutwack-Bloom et al., 2005	20 minutes 3 times per week	increase in positive moods
Motomura et al., 2004	1 hour each 4 days total	good impression of dog therapy improvement in apathetic state
Richeson, 2003	1 hour per day 3 weeks total	significant decrease in agitated behaviors significant increase in social interaction
Sellers, 2005	10-15 minute Sessions	increased socialization and decreased agitated behaviors

Mental Health Centers

A few studies have documented the use of animals in mental health centers. One study focused on undomesticated (feral) cats and their impact on clients involved in

outpatient therapy (Wells, Rosen, & Walshaw, 1997). Another study involved a mental health center which utilized a dog for an adolescent therapy group (Hanselman, 2001). A practitioner at a mental health center used feral cats which lived outside her office window as a therapy tool with clients. The cats were taken care of by the therapist, and given an outside shelter/home and food. They were free to come in and out of the therapist's office through an open window (Wells et al., 1997). The researchers reported that in powerful ways the cats triggered emotions, memories, and attachment efforts from many adult clients. This study suggested that feral cats can be a tool to help clients' access emotions and memories needed for further growth.

A study focused on the effects of having dogs present during an adolescent anger management group. The researcher used the dogs as a teaching tool to help the participants become aware that although the animals were abused, they still provided the participants with unconditional love and acceptance. Although the results indicated that the depression and anger scores of the adolescents increased with the dogs present, they also reported being more vulnerable to their feelings. The group appeared to be more emotional, verbal, and focused, with an acceleration of the therapy process due to the animal's presence (Hanselman, 2001). The researcher stated the lack of improvement in symptoms could have been related to the withdrawal of drugs and alcohol in the adolescents.

Residential Facilities for Children and Adolescents

Some facilities have focused on the use of AAT when working with children in residential facilities (Levinson, 1967). Some facilities have focused on the efficacy of AAT in children with mental retardation (Heimlich, 2001), while others used AAT when

working with juvenile offenders (Lloyd, 1997). One focused on farm animals and their effects on children victimized by abuse or neglect (Mallon, 1994). These limited studies provide some important insight into the utilization of animals with children who live outside their homes and who are cared for by strangers.

A residential facility caring for children with multiple disabilities studied the effects of AAT with the children. The researcher used her Labrador retriever, Cody, to evaluate the effect of AAT on the children's attention span, physical movement, communication, and compliance behaviors (Heimlich, 2001). This study had a number of confounding variables, such as low inter-rater reliability, small sample size, overworking of the therapy dog, and incompleteness of the study. Although the study showed the children moving towards more positive and socially desirable behaviors, the confounding variables listed above limit the generalizability and accuracy of these findings.

A residential program for male youth offenders used equine facilitated therapy as the treatment modality (Lloyd, 1997). The adolescents were encouraged to take ownership of a horse, and to feed, groom, exercise, and care for it during their stay at the facility. The researcher reported that many youth in residential treatment facilities who had poor relationships and attachments with others, learned to attach to the horses. The study showed that some residential children do develop the capacity to attach and relate to others, in this case horses.

A residential facility utilized different farm animals as therapeutic agents, and found five unique themes of the use of animals by the children (Mallon, 1994). The researcher stated the farm animals were used as healers, metaphors, surrogate caregivers,

comfort/nurturers, and communication tools. The author reported that 71% of the children visited the animals on a weekly basis, and 27% visited the animals daily. Several clients reported the reason for going to visit the animals was to “feel better” (Mallon, 1994).

School Settings

Numerous AAT programs have started in children’s educational settings. Some animals have been used to help children with behavioral problems (Limond, Bradshaw, & Cormack, 1997), or to help children learn to read (Jalongo, 2005). One school setting implemented the R.E.A.D. program, or Reading Education Assistance Dog program, for students who were behind in their reading skills. This program builds motivation, helps maintain focus, and increases task persistence, even when other interventions have failed (Jalongo, 2005). Typically, a child receives 20 minutes a week of reading to a dog and its handler.

One researcher sent out a questionnaire to schools based out of residential facilities, and wanted to identify how many of these schools allowed the children to own or care for pets. The researcher found 34% of the schools used farm animals to help the children, and 41% permitted the children to own pets (Levinson, 1971). The researcher stated that a pet could become a child’s confidant, friend, admirer, protector, and ally against institutionalization.

Another researcher investigated the use of a therapy dog while working as a speech therapist in a school setting. The author found that the children were more focused and attentive while completing their tasks. The children also appeared to enjoy having

the therapy dog present and would rush over to the next activity so that they could interact with the dog (Friesen, 2010).

One-way therapy dogs can help spread the word about AAT is for the human-animal therapy team to conduct presentations at schools to teach children about the benefits of AAT. Several researchers who are also animal assisted therapists conduct such presentations (Jalongo, Astorino, and Bomboy, 2004). The researchers brought their dogs into an elementary school and presented information to a group of third graders. They answered the children's questions about the dog's roles, and the expectations of the dog while working. As the children were allowed to come up and pet the dogs, they talked to the dogs, their peers, and even commented about their pets at home.

Other Settings: Home and Rehabilitation Facilities

AAT can take place in many different settings, some of which are not as widely used. Other studies looked at the effects of having an animal present at work (Wells & Perrine, 2001), at rehabilitation centers (Lust, Ryan-Haddad, Coover, & Snell, 2007) and while visiting children in the home (Hoelscher & Garfat, 1993; Struk, 1998).

One exploratory study looked at the perceptions of business owners and employees on the functions of companion animals in the workplace. The researchers found the pets served three major functions: as a surrogate for people with minimal or no social contact, as a vehicle for the expression of personality, and as a facilitator of social interaction between people in the work environment (Wells & Perrine, 2001). The majority of the pets were owned by the business owner; however, several business owners allowed employees to bring their animals to the workplace. Employees reported

benefits of pet presence for reducing stress, providing companionship, and as a pleasant diversion.

A program in the Midwest focused on the benefits of providing animal assisted activities to children who had to receive invasive medical treatments in the home. One recipient of these visits played with the dog during the two-hour visit and seemed to forget her discomfort, while another patient bandaged the dog from head to tail (Struk, 1998). The researchers reported the benefits of this type of therapy included orienting the children back to reality, alleviating depressive symptoms, providing emotional support, fulfilling the need for touch, and providing social stimulation.

A rehabilitation center measured the medication usage of the residents after a certified therapy dog began to reside at the center. The researchers investigated the patients' use of psychoactive and analgesic medications and laxatives over the nine months the dog lived at the center. They found a decrease in the usage of analgesic medications, with no change in psychoactive medications or laxative use. Qualitative data suggested the dog helped the patients report more optimistic thoughts, an increase in self-esteem, and normalizing of the environment.

Types of Animals

There are many different types of animals that can be used for AAT, with the most popular being dogs and horses. Dolphins are becoming more popular; however, the cost of dolphin-assisted therapy (DAT) can be prohibitive. Other animals that have been used for AAT are cats, rabbits, farm animals (pigs, goats, and cows), llamas, birds, and fish. Each animal has specific behaviors based on their species that may be beneficial for certain types of problems and populations.

Dogs

Dogs have been the animal of choice involving most research in AAT. Most dogs can be easily trained to obey commands, and are eager to please their owners. Some have an innate ability to understand when a person needs comfort and companionship (Katcher & Beck, 1983). They have been used with children, adolescents, adults, and the elderly. Levinson (1962) discussed in detail the role of the dog to a child, stating the dog is a child's companion, friend, confidante, teammate, and defender. A child feels loved, safe, and non-judged, and receives affection from their dog. Dogs can easily be transported to different settings such as schools, nursing homes, hospitals, day treatment centers, mental health centers, and in-home. They have been documented to be beneficial when working with different types of problems/concerns.

A study explored the use of dogs in a school setting when working with emotionally disturbed children. After 12 weeks of participating in individual AAT sessions, the boys exhibited a remarkable improvement in several areas. They appeared to give fewer negative comments to school personnel, were less distractible during the school day, had improved social relations with their peers, had more eye contact with others, and used a better tone of voice when talking with other (Kogan, Granger, Fitchett, Helmer, & Young, 1999). Children diagnosed with pervasive developmental disorders showed a more playful mood, appeared more focused, and were more aware of their social environment after the presence of a therapy dog (Martin & Farnum, 2002). An adolescent anger management group used two therapy dogs during the group sessions. The adolescents reported the dogs provided them with comfort and support when discussing important issues with other group members (Hanselman, 2001).

Many dogs have been brought to nursing homes/long-term care facilities to visit with the elderly patients. One nursing home specializing in the care of veterans, reported the dog visitation program helped promote social interaction among the patients (Fick, 1993). Many elderly patients in nursing homes suffer from Alzheimer's or dementia, and AAT dogs have been shown to decrease patients' wandering behaviors, increase social interaction, and increase orientation to reality, such as time, place, and date (Katsinas, 2000).

Some elderly patients are able to live at home, surrounded by family and friends. Few studies focus on the benefits of pet ownership and interaction with ethnic minorities. One study focused on the benefits for older Latino males who owned dogs. The authors found the participants who reported strong emotional attachment to their animals, were perceived to be in better health than their peers (Johnson & Meadows, 2002). A popular place for dogs to be utilized in AAT is within hospitals, to help patients of all types improve in their ability to function. They may be able to help a patient improve their cognitive skills/memory, daily living skills, spatial abilities, motor skills, sequencing of events, and social skills (Laun, 2003). Dogs have been used to help patients achieve rehabilitation goals such as walking and talking (Conner & Miller, 2000).

Horses

In 1967, the first therapeutic riding center was established in the United States, and today there are over 600 riding centers across the United States to help facilitate psychological and physical improvements for people of all ages (Kaiser, Spence, Lavergne, & Bosch, 2004). These therapeutic riding centers use horses to help participants reach desired goals or objectives. Recent studies have started to document

the effectiveness of equine facilitated therapy (EFT) with children (Roberts, Bradberry, & Williams, 2004), adolescents (Lloyd, 1997), and adults (Kaiser, Spence, Lavergne, & Bosch, 2004). One study focused on the positive effects of EFT on patients with psychiatric disorders such as schizophrenia (Bizub, Joy, & Davidson, 2003; Burgon, 2003) and one study identified the effects of EFT when working with patients who had eating disorders (Christian, 2005).

Until recently, the majority of EFT programs focused on the benefits of using horses with individuals having physical impairments such as impaired balance and coordination. After only eight minutes of riding a horse, children with Cerebral Palsy increased their ability to use their muscles more symmetrically by 64.6%, in comparison to the control group which showed a decrease of -12.8% (Benda, McGibbon, & Grant, 2003). As the benefits of EFT with physically challenged individuals became more widely known, programs started to expand its use to address more psychologically based treatment goals.

A residential program for juvenile youth used horses to teach kids how to attach to living beings (Lloyd, 1997). The youth learned to care for the horses during their stay at the residential facility, and in the process developed skills they could take with them when they left. Several youth went on to work in veterinary offices, or other animal related employment sites. A pilot study was conducted to explore the effects of EFT on children's anger, quality of life, and self-competence (Kaiser, Spence, Lavergne, & Bosch, 2004). They found the children's anger significantly decreased after the five days of therapeutic riding, which suggests that children's anger might be addressed using EFT as an intervention.

One study focused on the effectiveness of EFT when working with individuals who suffered from eating disorders (Christian, 2005). During EFT, the horse became a metaphor for one client's eating disorder, and she was able to use the horse to gain a greater sense of awareness and perspective on how her eating disorder was affecting her. The participant was able to understand how the eating disorder controlled her, and how she needed certain supportive people around her to help her overcome the problem. This study demonstrated the use of a horse to help solve problems and transfer new learning to everyday life.

Table 3 summarizes the use of horses in mental health patients suffering from schizophrenia, depression, or other psychotic disorders (Bizub, Joy, & Davidson, 2003; Burgon, 2003), with children and adolescents who were high risk for academic and social problems (Trotter, Chandler, Goodwin-Bond, & Casey, 2008), and in children with emotional disorders (Ewing, MacDonald, Taylor, & Bowers, 2007),

Table 3

Summary of Studies Showing Effects of AAT Using Horses

Study	Design	Findings
Bizub et al., 2003	10 weeks	Increased self-esteem, happiness, coping skills to deal with fear
Burgon, 2003	weekly sessions	increase in confidence, acquired new coping skills
Ewing et al., 2007	9 weeks	Qualitative findings emphasized positive changes in children's conduct and social acceptance
Klontz et al., 2007	28 hours in 5 days Group format	significant reduction in psychological distress, increase in psychological well-being
Trotter et al., 2008	12 weeks	significant increase in positive behaviors and decrease in negative behaviors

Dolphins

For over 25 years, dolphin assisted therapy (DAT) has been utilized in working with a variety of different populations and problems (Brensing & Linke, 2003). Studies involving DAT have focused on mental and physical disabilities (Brensing & Linke, 2003), psychoneurological diseases (Lukina, 1999), autism (Servais, 1999), and other severe disabilities (Nathanson, 1998; Nathanson, de Castro, Friend, & McMahon, 1997). A common challenge with DAT is related to researchers trying to identify whether working with the dolphins has a therapeutic effect, or if DAT is more of a novelty situation for clients. One study focused on the flaws of several DAT studies and argued

for more rigorous research protocols to be followed to determine the effectiveness of using dolphins in treatment (Marino & Lilienfield, 1998).

One study examined changes in children's verbal and nonverbal responses when identifying correct geometric shapes, and whether reinforcement using their favorite toy, or interaction with a dolphin, had an effect on the number of correct responses (Nathanson, & de Faria, 1993). The eight children in the study all had a diagnosis of mental retardation, and none could identify the geometric shapes prior to the study. A trained dolphin was used who had previous experience with disabled children. Results showed that the frequency of verbal responses increased when dolphins were present. The authors argued it was not due to the fact the dolphins were a novelty item because children with this type of disorder prefer familiar objects since they are predictable and safe.

Two studies focused on the short-term and long-term effectiveness of DAT with children suffering from a wide range of physical and speech disabilities. Each child received up to 17 therapy sessions within a two-week period, which focused on independent achievement of a fine/gross motor skill or a specific speech/phrase (Nathanson, de Castro, Friend, & McMahon, 1997). None of the children achieved success with their specific goals prior to treatment, and every child had been receiving occupational, speech, and/or other therapies prior to DAT. The researchers reported 71% of children could independently reach/touch the correct object and 57% could independently say the correct word or phrase. Many of the children's parents reported AAT services were utilized prior to DAT treatment. A follow up study a year later was conducted to identify whether DAT had a long-term effectiveness on the treatment goals

of children who participated in DAT within a two-year period of time (Nathanson, 1998).

Using random selection, 25% of the participants received a questionnaire addressing the specific behavioral improvements and maintenance of the behaviors which led to the child's participation in DAT treatment. The authors reported therapy had been able to increase the amount of time the children participated in and benefited from conventional therapies by more than 50%. It appeared parents perceived DAT as helpful, and believed it provided long-term effectiveness in achieving their child's goals.

A critique of two of Nathanson's studies suggested there were numerous threats to validity, causing doubts to the findings (Marino & Lilienfield, 1998). The authors reported the lack of experimental control, no control group, and numerous confounding variables, which raised important questions about the results. The authors suggested Nathanson was premature in giving DAT credit for long-term effectiveness because it could not be determined whether the lasting effects were from DAT, or from the other therapies the children received after DAT treatment. The authors raised important considerations for future DAT research about how to limit the influence of confounding variables.

One study focused on the behaviors of dolphins when interacting with different human populations, including healthy adults, healthy children, and children with disabilities (Brensing & Linke, 2003). This study empirically tested whether dolphins could distinguish between different groups of humans, specifically healthy adults, healthy children, or children with physical or mental health problems. Five untrained dolphins were observed while interacting with the different groups in an enclosed salt-water environment. The researchers found all the dolphins to have greater physical distances

from the adults than from the children, and one dolphin preferred the children with physical or mental health problems.

A DAT study in Belgium focused on autistic children's ability to learn new information in the presence of dolphins, with aid from a computer, or in a classroom environment (Servais, 1999). The results were mixed, and the authors were unable to draw conclusions about the comparative effectiveness of the presence of dolphins, the use of a computer, or the classroom environment. A study focusing on rehabilitation of children with psycho-neurological symptoms found positive results when they interacted with dolphins (Lukina, 1999). Four different groups interacted with dolphins: healthy children, children diagnosed with infantile neurosis, mentally retarded/autistic children, and children diagnosed with other diseases. Parents of the healthy children reported new qualities emerging, such as kindness, attentiveness to others, self-control, and self-discipline. Children diagnosed with infantile neurosis showed an overall reduction of symptoms by 50-70%. Children with mental retardation/autism had an 80% increase in their verbal expressions. Children diagnosed with other diseases showed improved sleep, happier moods, and greater confidence in their strengths and abilities. The authors suggested that dolphins could help people by fostering mutual understanding and love.

Birds

Several facilities examined the use of aviaries for elderly patients and whether or not the bird impacted the patients in positive ways. One day-treatment facility acquired an aviary (large birdcage) for their residents to watch while in the activity room (Holcomb, Jendro, Weber, & Nahan, 1997). A nursing home in Ohio purchased bird feeders for residents to help promote personal responsibility (Banziger & Roush, 1983).

A treatment group for psychiatric inpatients utilized caged finches (Beck, Seraydarian, & Hunter, 1986). A hospital in Sweden utilized birds on a rehabilitation ward to assess alleviation of mental fatigue (Falk & Wijk, 2008).

A day-treatment program serving veterans, studied the effects of an aviary on depression levels of their patients (Holcomb, Jendro, Weber, & Nahan, 1997). Over the course of eight weeks an aviary was present, then absent, for two week intervals, and video recordings of patients' reactions to the aviary were made. The level of depression for each patient was determined by using the Geriatric Depression Index. Although the reduction of depressive symptoms was not statistically significant, the participants who used the aviary most showed more relief of depression symptoms than those who used it less. Anecdotally, staff members reported an increase in the length of family visits, including conversation with the patients, while visiting in the activity room when the aviary was present.

Full time elderly care facilities may increase patients' dependency or promote learned helplessness (Banziger & Roush, 1983). One elderly residential facility gave bird feeders to some residents to see if it would increase their sense of responsibility, and thus decrease dependency or helplessness (Banziger & Roush, 1983). It was each resident's responsibility to keep the staff informed of when the bird feeders needed to be filled. Patients' self-reports indicated significant increases in self-control, happiness, and activity from the pretest to posttest measurement. Several staff members reported patients being more assertive about their needs, wanting information on birds, and interacting with peers. Both studies showed promising results regarding the well-being

of the elderly population; however, more studies utilizing birds are needed to determine the specific benefits of having birds in nursing homes and other facilities.

A small study focused on the impact of finches on psychiatric inpatients' attendance and functioning during daily group sessions, compared to these behaviors without the presence of finches. The authors found the psychiatric patients who had the finches as part of their environment during group sessions, had a higher rate of attendance compared to the non-finch group (Beck, Seraydarian, & Hunter, 1985). They also found the group with the finches was much less hostile than the non-finch group. The authors suggested replicating the study with a larger sample size, as well as including interaction with the birds to determine the effectiveness.

A rehabilitation ward at a Swedish hospital placed a bird cage in a common area, the lounge, where all patients had access to observing the birds. The researchers investigated whether the presence of the birdcage decreased mental fatigue on patients who were recovering from physical ailments. They found that the patients had an increase in involuntary attention, enhanced social behaviors, and increased use of mental energy while watching the birds.

Cats

Several studies have focused on the use of cats as therapeutic tools when working with mental health clients. One study used feral (stray) cats found at the mental health center (Wells, Rosen, & Walshaw, 1997). Two studies looked at the effectiveness of a live cat on the communication of elderly patients in nursing homes (Curtright & Turner, 2002; Greer, Pustay, Zaun, & Coppens, 2001), and one study observed the effects of a robotic cat on patients with dementia (Libin & Cohen-Mansfield, 2004). Two studies

focused on social skills with an elderly population (Perelle & Granville, 1993), on and patients with schizophrenia (Barak, Savorai, Mavashev, & Beni, 2001). None of the living cats in these studies were trained to respond to commands, but were able to interact with patients on their own regard.

One study written by a therapist focused on the benefits of feral cats in an outpatient mental health center (Wells, Rosen, & Walshaw, 1997). The author reported that on a warm day a stray cat jumped through her open office window, and a relationship between the cat, kittens, and therapist developed. Any client who came for services was given the option of having the cats present or not during their therapy session. The author reported the cats contributed to the therapy how and when they chose, each having their own character, preferences, pleasures, and dislikes. As enhancements to the therapeutic process, the cats elicited emotions, vivid memories and obvious attachment efforts from many adult clients. The author recalled a particular 14-years-old client, who could only verbalize the traumatic events of his sexual abuse once his favorite cat jumped on his lap. This is the only study on the use of feral (stray) cats thus far, and showed positive results of the cats' presence in the therapy sessions.

A single subject experiment explored the benefits of a cat's presence (stuffed animal cat and live cat) on the communication of an elderly patient with dementia (Curtright & Turner, 2002). There was minimal improvement of verbal communication from the patient at the end of the five-week study, and the authors were not able to determine whether it was due to the presence of the cat or to something else. A follow up study to Curtright and Turner (2002) examined the verbal communication of elderly nursing home residents with dementia (Greer, Pustay, Zaun, & Coppens, 2001). This

study had six participants, and compared a toy cat (stuffed animal) and a live cat with two different treatment groups. The authors reported that one group had a greater amount of verbal communication when the live cat was present, which may have been due to the fact that the cat was present at the first experimental phase. The authors reported several participants lost interest in the study as it progressed and this may have affected the outcome.

Some facilities do not want to invest in the care and maintenance of real animals, as well as fearing the liability if patients are hurt due to an animal scratching or biting. Due to the cost and liability concerns, a nursing home explored the benefits of “robototherapy” with elderly females suffering from dementia (Libin & Cohen-Mansfield, 2004). The authors wanted to see if the use of a robotic cat, or plush toy cat, would affect the patients’ level of agitation and affect, or increase their ability to engage with others. After 2 sessions, the patients showed a decrease in agitation symptoms with both the plush toy cat and the robotic cat. The patients showed an increase in pleasurable affect and interest, and 78% of patients held the plush cat, whereas only 22% held the robotic cat. This study showed that the use of a robotic or toy cat might help facilitate positive changes when working with the elderly. Given the small sample size (N=9), future studies should focus on larger sample sizes and longer experimental sessions.

Two studies focused on the utilization of cats and other animals in the social and adaptive functioning of participants (Barak, Savorai, Mavashev, & Beni, 2001; Perelle & Granville, 1993). One study focused on the socialization and self-maintenance behaviors of residents in a nursing home facility. After 10 weeks of weekly two-hour visits with the animals, the residents showed dramatic improvement in social and self-maintenance

behaviors (Perelle & Granville, 1993). Although the researchers caution the study may have been biased because the participants were self-selected, they noted the change in behaviors continued, even at the one month follow up. Although the improvement dropped significantly, the behaviors were still more positive than during the pretest, and the differences between male and female participants were statistically significant. They reported the animals helped males interact more socially with others, whereas the female participants' social interaction remained consistent throughout the study. Cats may have a positive socializing effect with the elderly in the nursing home, especially with elderly males.

Another study focused on the social-adaptive functioning of schizophrenic patients in long-term hospitalization in Israel (20-34 years range of stay). For a year, participants received a cat or dog to interact with during a weekly three-hour group session (Barak, Savorai, Mavashev, & Beni, 2001). Group activities for members included activities such as petting, grooming, and bathing (Barak et al.). Control groups met for the same amount of time, and discussed current events in the news. Using the social-adaptive functioning evaluation, the researchers reported treatment group participants had significant social improvements within the first six months, and at the twelve-month interval. Utilizing cats may help patients with schizophrenia adapt more positively to their surroundings.

Other Types of Animals—Aquariums and Farm Animals

Although dogs and horses are the most popular animals to use in AAT, some researchers are starting to utilize less common types to help facilitate therapeutic change. Several studies utilized aquariums for different problems, such as poor nutrition, stress,

and anxiety (Barker, Rasmussen, & Best, 2003; DeSchrive & Riddick, 1990; Edwards & Beck, 2002), and one study used farm animals with children (Mallon, 1994).

A common concern when caring for Alzheimer's patients is the lack of nutritional intake and subsequent weight loss. Several nursing homes used portable fish tanks to examine whether this would influence the eating habits of elderly residents (Edwards & Beck, 2002). Two treatment facilities placed aquariums in the communal dining room, and one placed a picture of an ocean scene. The facility with the ocean scene showed no difference in caloric intake or weight gain for the elderly participants. However, the facilities with the aquariums showed an 87% increase in caloric intake or weight gain. Facility staff members reported the more agitated patients sat for longer periods, and the more lethargic patients appeared more attentive to their surroundings (Edwards & Beck, 2002). An unexpected benefit of the aquariums was a 25% decrease in the use of nutritional supplements, such as Ensure, because more patients ate greater than 50% of their meals. This unexpected benefit saved each facility over \$300 a month in food expenses. It appears that the presence of an aquarium can decrease wandering, increase attention span and interest, and decrease extra food cost for Alzheimer's patients.

A study examined the effect of aquariums, videotapes of aquariums, and placebo video (static TV) on the stress level of elderly participants (DeSchrive & Riddick, 1990). The authors looked at the pulse rate, skin temperature, and muscle tension of each participant, and found that watching a videotape of an aquarium had the greatest impact on the physiological symptoms of the participants (p. 47). Several problems with this study included a small sample size (N=27), and only three total sessions (two practice, one testing) of eight minutes each.

Many patients who receive electroconvulsive therapy (ECT) for the treatment of bipolar and depressive disorders experience high levels of anxiety and fear prior to treatment (Barker, Rasmussen, & Best, 2003). The authors examined whether the presence of an aquarium would reduce the patients physiological symptoms of fear, depression, anxiety, and frustration prior to ECT. There was no difference for heart rate, blood pressure, or self-report for the aquarium or control group condition. There was a trend towards less anxiety with an aquarium present. Although measurements of heart rate and blood pressure did not change, the patients reported a decrease in anxiety. The patients self-report suggested the need for more research on the benefits of aquariums when working with psychological symptoms.

A children's residential facility in New York explored the effects of farm animals (cows, sheep, horses, goats, rabbits, etc.) on the children (Mallon, 1994). The author investigated the reasons the children visited the farm animals, how they communicated with the animals, and what type of nurturance and attachment the animals provided to them. From the children's questionnaires and staff interviews, the author found the farm animals to have healing and therapeutic effects for the children. The children reported visiting the farm animals daily (27%), or at least once a week (71%), and 67% visited the farm animals to feel better (Mallon, 1994). Talking, petting, feeding, and caring for the animals needs were the common interactions between children and the animals. A child who used the animals to feel better stated, "When I'm mad, I go up and play with the sheep" (p. 462). The author commented that the "animals can fulfill the human need for responsive acceptance and loyalty, because, having sensitivities, needs, and personalities of their own, animals can truly serve as companions, friends, confidants, playmates, and

sometimes even scape-goats”(p. 470). Farm animals are not commonly used for AAT, and when they are used, they appear to be beneficial in understanding and supporting children.

The use of farm animals was been studied in relation to adults diagnosed with several mental health problems. One study evaluated the effectiveness of patients visiting and working on a farm for 3 hours, twice a week, for 12 weeks. The results indicated that the patients showed a significantly higher level of intensity in their work efforts, and were more exact in their movements and purpose (Berget, Skarsaune, Ekeberg, & Braastad, 2007). Several of the authors in the above study also examined the effects of farm animals on self-efficacy, coping skills, and quality of life. They found a significant increase in self-efficacy and coping abilities; however, there were no changes or enhancement in quality of life (Berget, Ekeberg, & Braastad, 2008).

Types of Problems

Mental Health Concerns: Alzheimer’s/Dementia

One of the leading areas of research regarding AAT is individuals with Alzheimer’s or dementia. Alzheimer’s is one of the fastest growing diseases in the country, and an individual’s mental, physical, and emotional decline can occur slowly over a decade, or more rapidly within several years. AAT and Alzheimer’s research has focused on different dimensions of the disease, such as agitation (Richeson, 2003), disruptive behaviors (Kanamori et. al., 2001; McCabe, Baun, Speich, & Agrawal, 2002), socialization (Katinas, 2000; Kongable, Buckwalter, & Stolley, 1989), depression (Motomura, Yagi, & Ohyama, 2004), and functioning level (Walsh, Mertin, Verlander, & Pollard, 1995).

A common report among mental health/human service professionals regarding Alzheimer/dementia patients is their constant disruptive and agitated behaviors in institutional settings. After only three weeks of AAT, there was a marked decrease in agitated behaviors of patients and an increase in social interaction with others (Richeson, 2003). An interesting side note is that the AAT dog seemed to create a more positive atmosphere not only for the patients, but for staff as well. Another study found that when an Alzheimer's care facility placed a dog on the unit as a live-in resident, a decrease in behavioral problems occurred during the day (McCabe, Baun, Speich, & Agrawal, 2002). Although this was not a specific AAT intervention, it appeared that a dog's presence was beneficial to patients.

Many Alzheimer's/dementia patients become increasingly withdrawn as their disease progresses. The presence of a dog in a nursing home increased socialization among residents by drawing them out of isolative behaviors and orienting them to their reality (based on the days of the week on which the dog visited). Patients who wandered around the facility grounds were able to hold the leash of the dog, and when they got too far away from staff, the staff was able to call the dog, which in turn brought the patient back within closer proximity of staff (Katsinas, 2000). Another study with similar positive findings, suggested that a dog's presence increased positive social interaction among patients living with Alzheimer's/dementia (Kongable, Buckwalter, & Stolley, 1989). The authors found there was no difference whether the dog was present within a group, or on an individual basis.

A study in Japan explored the benefits of AAT on depression and irritability on Alzheimer's/dementia patients living in a nursing home (Motomura, Yagi, & Ohyama,

2004). They found AAT provided no difference for patients, even though the patients reported they liked the AAT activities, and would participate in them in the future. An unexpected benefit was that the patients appeared to be less apathetic after the AAT sessions, even though it did not show up as fewer depressive symptoms.

Psychotic Disorders

Individuals suffering from psychotic disorders, such as schizophrenia and schizoaffective disorder, face unique challenges in trying to remain independent, fully functioning, and productive members of society. Human/health service professionals have started to implement animals into their treatment facilities to help facilitate positive changes for their patients. Several studies have used animals within group treatment (Holcomb & Meacham, 1989, Marr et al., 2000), or during individual treatment (Kovacs, Kis, Rozsa, & Rozsa, 2003), and one facility incorporated animals into the daily living environment of a halfway house for psychiatric patients (Nielsen & Delude, 1994).

Incorporating animals into the living quarters may be an efficient way to increase the functioning level for mental health patients. Animals such as guinea pigs were brought into a halfway house, which increased social interaction between people, initiative in taking care of others, and more conversations with deeper meaning (Nielsen & Delude, 1994). Adult patients diagnosed with schizophrenia received AAT weekly for nine months, which resulted in an increase in adaptive functioning, and the ability to form stronger bonds with others (Kovacs, Kis, Rozsa, & Rozsa, 2003). This study was limited in its explanation of the specific components measured within adaptive functioning. Future research may examine the different parts of functioning to determine if AAT is more effective on some disorders? than on others.

Several studies focused on utilizing animals within treatment groups for patients with psychotic disorders. One study looked at the changes in prosocial behaviors of group members after receiving AAT. The authors reported by week four, the participants appeared more sociable, helpful, active, responsive to surrounding environment, and interactive with other participants (Marr et. al., 2000). The researchers and staff at an inpatient hospital ward observed whether the presence of animals would attract the more isolated patients on the unit. They found the isolated patients were drawn to groups when the animal was present, displayed an increase in social interaction with peers, greater verbalizations and expression of feelings, and showed a more positive affect (Holcomb & Meacham, 1989). These few studies working with psychotic disorders provide an initial look into the benefits of AAT. More research is needed to understand the specific and long-term benefits of AAT.

Mood Disorders

The use of animals to help with mental health concerns such as depression, anxiety, anger, stress, and trauma are becoming more commonplace. The most widely studied use of AAT is within the adult populations having anxiety and depressive disorders (Barker & Dawson, 1998; Jessen, Cardiello, & Baun, 1996; Lutwack-Bloom, Wijewickrama, & Smith, 2005; Schwartz & Patronek, 2002). There have been a few studies exploring the benefits of AAT working with the child population and specific concerns, such as sexual abuse (Reichert, 1994; Reichert, 1998), conduct disorder (Gullone, 2003), anger management (Hanselman, 2001) and stress levels (Hansen, Messinger, Baun, & Megel, 1999; Nagengast, Baun, Megel, Leibowitz, 1997).

The majority of other studies regarding AAT and mood disorders focus on children. One author wrote about using her dog in individual (Reichert, 1998) and group therapy (Reichert, 1994) for sexually abused girls. She found the girls could use the dog to disclose their traumatic past in a safe and nonjudgmental way. The author utilized the dog for specific components of therapy, such as disclosure, projection of feelings, and storytelling about abuse with a dog as the main character. Another study explored the use of dogs with children diagnosed with conduct disorder. The author found that the dog gave children the opportunity to develop positive, accepting, and supportive relationships with the animal. It also improved their ability to express their emotions and invest in something other than themselves, which is free of negative evaluation and rejection (Gullone, 2003).

Two studies focused on the benefits of a dog's presence for children receiving their annual physical examinations. One found that the dog alleviated distress in children ages 2-6, as the children acted out less, and were more cooperative with the doctor or parent while being examined (Hansen, Messinger, Baun, & Megel, 1999). The second study found that the dog alleviated physiological distress in children, as evidenced by lower blood pressure, slower heart rate, and a reduction in behavioral acting out symptoms (Nagengast, Baun, Megel, Leibowitz, 1997). Although there are many different types of mood disorders, or other mood related symptoms, to explore, the majority of studies have focused on depression, anxiety, or children. Much more research is needed in this area to gain a better understanding of how and when AAT may be beneficial, and for whom.

Table 4 provides a summary of AAT interventions used for the treatment of mood disorders. Two studies focused on reduction of anger (Hanselman, 2001; Lange, Cox, Bernert, & Jenkins, 2006/2007) while many others focused on depression and loneliness among adults (Banks, Willoughby, & Banks, 2008; Jessen, Cardiello, & Baun, 1996; Sockalingam et al., 2008). Although several of the studies showed no significant effect in the decrease of depressive symptoms, the participants in those studies still reported positive feelings associated with the AAT intervention (Le Roux & Kemp, 2009; Phelps, Miltenberger, Jens, & Wadson, 2008).

Table 4

Summary of Studies Showing Effects of AAT for Mood Disorders

<u>Study</u>	<u>Design</u>	<u>Findings</u>
<u>Anger</u>		
Hanselman, 2001	10 weeks total AAT group	significant decrease in anger, participants learned to relax
Lange et al., 2006/2007	AAT group	Provided a calming effect on clients, provided humor during group, increased feelings of safety
<u>Depression</u>		
Banks et al, 2008	30 minutes 8 weeks total	reduction of feelings of loneliness
Jessen et al., 1996	10 days	Significant decrease in depression symptoms
Le Roux & Kemp 2009	1 time a week 6 weeks total	No significant findings but participants reported enjoying the dog visits
Lutwack-Bloom et al., 2005	20 minutes 3 times per week	increase in positive moods
Phelps et al, 2008	1 time a week 6 weeks total	no significant findings but participants reported enjoying the dog visits
Sockalingam et al., 2008	2 hours a day 3 weeks total	Improved mood, outlook on life, increase in spontaneous speech, decrease in anxiety And psychomotor agitation

Cognitive Concerns

Cognitive functioning of individuals includes their ability to communicate verbally with others, their educational achievements, and their overall ability to learn new information. AAT has begun to be utilized to help individuals in these areas. The two main areas of cognitive functioning and the use of AAT being studied are children's

ability to learn with the help of dogs (Jalongo, 2005; Jalongo, Astorino, & Bomboy, 2004; Limond, Bradshaw, & Cormack, 1997), and elderly patients' communication skills (Adams, 1997; Taylor, Maser, Yee, & Gonzalez, 1993).

As children progress through their school years, their cognitive abilities are constantly challenged and stretched. Some children have difficulty with reading, or learning any new information, which may lead to behavioral problems in the classroom. One study explored the benefits of the R. E. A. D (Reading Education Assistance Dogs) program, in which a dog and its owner came to work with children individually. The children would read to the dog several times a week to increase their reading ability (Jalongo, 2005). The R. E. A. D. program should offer many benefits for the children, such as an increase in their motivation to practice their reading skills, ability to be more focused on reading tasks, and increased persistence in completing the reading assignment. A child's ability to focus on reading one-on-one to an animal shows an overall improvement in academic achievement (Jalongo, 2005; Jalongo, Astorino, & Bomboy, 2004). A study involving children diagnosed with Down syndrome explored the effect of a live dog versus a stuffed dog on the children's behaviors. It appeared that the dogs helped the children focus more on the task at hand, be more responsive to adult directions, and be less distracted by outside stimuli (Limond, Bradshaw, & Cormack, 1997).

Lack of communication with elderly patients is a concern for many human/health service professionals. Some health care providers are starting to use animals in treatment to determine whether the presence of an animal can increase the amount of communication, and the results are mixed. Two studies focused specifically on the

communication level of stroke patients. One study used a photo of a puppy versus a live puppy, and found no difference in the patients' communication (eye contact or vocalizations) while in the presence of staff (Taylor, Maser, Yee, & Gonzalez, 1993). A second study focused on a stroke patient who received AAT two times a week for four weeks. The patient had a significant increase in appropriate verbal commands to the dog, and an overall shift from non-verbal to verbal behaviors (Adams, 1997). Although this study had promising results, a follow up visit showed the patient had shifted back to her original non-verbal functioning level.

Several other studies have focused on improving the communication skills of adults with schizophrenia (Kovacs, Bulucz, Kis, & Simon, 2006), and stroke victims suffering from aphasia (LaFrance, Garcia, & Labreche, 2007; Macauley, 2006). These studies did not produce significant results in demonstrating that AAT was a successful intervention, although some patients reported liking the presence of the animal during treatment. With such few studies demonstrating effectiveness regarding AAT as a successful intervention for cognitive and communication skills, more research is needed to determine how and when AAT can be a more efficient treatment technique.

Physical Concerns

There are numerous studies focusing on a human's physical, mental, or emotional problems, and whether AAT may be beneficial in helping improve these conditions. Several studies have focused on children (Nagengast, Baun, Megel, & Leibowitz, 1997; Moody, King, O'Rourke, 2002; Spence & Kaiser, 2002), and AIDS/HIV infected adults (Allen, Kellegrew, & Jaffe, 2000; Siegel, Angulo, Detels, Wesch, & Mullen, 1999). Other studies of AAT involved specific medical diagnoses such as cancer (Johnson,

Meadows, Haubner, & Sevedge, 2003; Muschel, 1984), spinal cord injury (Roberto, 2002), and cerebral palsy (Peterson, 1999).

In 1975, one of the first studies within a hospital setting indicated the importance of AAA for bed-ridden patients (Corson, Corson, Gwynne, & Arnold, 1975). The authors reported 47 out of 50 patients receiving AAA dog visits improved in areas of self-respect, independence, social interaction, and responsibility. They stated the essence of animal visits “is to introduce a non threatening loving pet to serve as a catalytic vehicle for forming adaptive and satisfying social interactions” (Corson et. al., p. 285).

One study focused on the use of AAT with a patient suffering from a spinal cord injury (Roberto, 2002). The goal of the AAT treatments was to increase the patient’s activity level, promote a larger range of motion, and help the patient perform more required tasks. The author reported the patient achieved greater movement towards the goals, but also appeared to have an increase in self-esteem, confidence, social skills, and nurturing behaviors. Another study focused on the mobility of a young girl diagnosed with cerebral palsy. Murphy, the dog, helped the girl learn to walk using her walker while she led Murphy down the hall with his leash (Peterson, 1999).

Several studies involving cancer patients utilized AAT to help them feel better while in the hospital. One study used AAA visits to hospitalized patients, who reported enjoying the visits, perceived them as part of their treatment/therapy, and were more likely to tell other people about the animal visiting (Johnson, Meadows, Haubner, & Severdige, 2003). A nursing home caring for cancer patients used AAT sessions to help patients feel less anxious and fearful. Although the researcher was not able to determine

the effect of AAT on anxiety or fear, the patients requested AAT be a permanent part of their treatment plan once the study was completed (Muschel, 1984).

Children who have to cope with serious medical problems are often hospitalized, restricted from socializing activities with friends, and miss many school days. Their illness can lead to overwhelming feelings of stress and isolation from others (Spence & Kaiser, 2002). A study in Australia examined the benefits of AAT on an inpatient children's ward, and the staff perceived AAT to be beneficial for the children by distracting them, helping them relax, and creating a happier therapeutic environment (Moody, King, O'Rourke, 2002). A study focusing on chronically ill children utilized AAT to determine the benefits on the children's stress levels. The authors found that "the presence of a companion animal may serve as a distracter that diminishes the intensity of the distress as perceived by the children while still supporting appropriate behavioral responses" (Spence & Kaiser, 2002, p. 50). One hospital focused on the effects of AAT group versus other type of recreations group, such as arts and crafts, and whether or not AAT helped children cope better with being in the hospital. They found a 46% increase in the positive affect of the children regarding their hospital stay after AAT sessions. In addition, the children did not appear to focus as much on when they could go home, but rather on what they needed to do in the hospital to get better (Kaminski, Pellino, & Wish, 2002).

A main concern for health/human service professions for individuals diagnosed with AIDS/HIV is the increase in social isolation due to the disease. Several studies explored the benefits of animal presence in the lives of these individuals. One study indicated that individuals with AIDS/HIV who were pet owners reported much less

depression than those with the disease who were not pet owners (Siegel, Angulo, Detels, Wesch, & Mullen, 1999). Another study explored the benefits of owning pets for people with AIDS/HIV, and found the pet owners had a strong emotional bond and unconditional love from their pets, which they did not perceive from other people (Allen, Kellegrew, & Jaffe, 2000). The pet owners reported mixed feelings about caring for the pets; some thought it had more benefits by providing them with a routine and responsibility to care for an animal, and others thought pet care could be a burden, especially on days when they were already not feeling well because of AIDS/HIV symptoms.

Summary

It has been demonstrated that there has been an evolution regarding the types of animals used, and the populations, settings, and problems appropriate for AAT. The evidence to support AAT as a therapeutic aid in mental health/human service professions ranged from remarkable improvements to minimal benefits. There are numerous anecdotal and case study reports of AAT benefits. The quantitative studies showed mixed results, with a number of physical, psychological, and health benefits for patients.

The range of animals used in AAT includes primarily dogs, horses, and dolphins, with a few studies exploring more obscure AAT animals, such as cows, pigs, rabbits, and llamas. The most popular settings for AAT to occur are hospitals and nursing homes, although studies are starting to show the benefits of AAT in schools, mental health centers, and in-home programs. Clients may go to a mental health/human service professional for a variety of concerns. AAT has been shown to be beneficial across the spectrum of physical, psychological, and cognitive problems. As AAT continues to grow

in popularity among professionals, more research is needed in all areas of study, with more methodologically sound studies exploring the benefits and concerns animals can provide.

CHAPTER III

METHODS AND PROCEDURES

Introduction

The purpose of qualitative research is to answer “How?” or “What?” questions in a way that presents a detailed picture of a phenomenon, and helps the reader understand how participants make meaning of their experiences. The qualitative approach also provides a way to analyze and interpret the participants’ meaning in a holistic manner (Creswell, 1998; Denzin & Lincoln, 2005; Marshall & Rossman, 1999; Morrow, 2007). The main intent of interviewing is to have a purposeful conversation with participants and obtain specific information on a topic of interest (Merriam, 2009). I used in-depth interviewing to help understand the participants’ perspectives in regard to their history, values, beliefs, and experiences on the use of animals in a therapeutic environment (Taylor & Bogdan, 1998). During in-depth interviews with professionals, information was collected about their past and current interaction with animals as well as how they utilized the animals in the counseling relationships. Participants also provided their views on the perceived benefits of animal assisted therapy (AAT) for clients, and future implications for AAT in psychology.

This chapter addresses the role of the researcher in qualitative research, the theoretical framework that was used to guide the study, the methodology used to collect

the data, participant descriptions, procedures, data collection, data analysis, and trustworthiness of the study.

Researcher

One of the critical distinctions between quantitative and qualitative research is the role of the researcher. In qualitative research, the role of the researcher is to be the primary instrument to collect, analyze, and interpret the data from the study. As the researcher, my prior life experiences and values and beliefs have influenced every aspect of this study. My world view influenced my choice of animal assisted therapy as a topic, the methodological design, and the data collection and analysis. My decisions as a researcher were also influenced by my perceptions regarding my role as a future psychologist, and my experiences as a practicing licensed professional counselor, and the owner of several animals (Merriam, 2009).

Throughout my career, I have come across professionals in the mental health/human services professions who have utilized animals in their practice. They have worked in various settings such as elementary schools, community mental health centers, and departments of juvenile justice. I had the opportunity to talk with them and explore their rationale for incorporating animals into their work environment. Each professional reported a number of benefits that their animals provided to their clients. Several professionals believed it helped their clients talk more openly and freely when the animals were part of the session.

I have enjoyed working in psychology for the last 15 years, and have had animals as a part of my life since I was a small child. I understand personally the benefits an animal can bring to one's life, the comfort they can provide, and the feelings of security

when one is feeling scared or sad. Therefore, it made sense to me to combine two of my passions, animals and psychology, into one cohesive unit, animals and psychology, and to interview other professionals who had done the same.

Animals that are well trained, friendly, and responsive to their owners during psychotherapy sessions can become a healing agent for clients; therefore, it is not surprising that more professionals are integrating animals into their professional careers. There are a wide range of benefits to having animals present in one's life. Animals may provide companionship, unconditional love, acceptance, friendship, playfulness, and are always ready with a listening ear. Since therapy can be a stressful yet beneficial experience for clients it may seem appropriate to have an animal present to help a client adjust to the situation and create a non-threatening environment. It was assumed in this study that animals provided benefits in therapy just as they do in one's personal life, and that incorporating animals into the therapeutic process can provide benefits as well.

Theoretical Framework

The theoretical perspective for this study was constructivism, which is based on the range of perspectives of a human beings experience. The earliest documented references for constructivist thinking go back to Lao Tzu, whose writings formed the basis of Taoism around the 6th century B.C. Around 500 B.C., Buddha and Heraclitus wrote about constructivist concepts (Mahoney, 2003). Buddha wrote about the changing nature of human life, and how humans play a large role in the construction of their worlds by way of their thoughts and fantasies. The opening of Buddha's book of spiritual reflections, *Dhamapada*, states, "We are what we think. All that we are arises with our thoughts. With our thoughts we make the world" (Walsh, 1999). Heraclitus wrote about

how the world is always changing, and with changes come new developments. He stated that you cannot step into the same river twice, and it is not just the river that is changing, also the individual who has changed with experience (Mahoney, 2003). My perspectives and world views, as well as those of each participant, changed based on the experiences we had while participating in this study.

There were three main contributors to the constructivist viewpoint in the past three centuries. In the late 1600s to mid-1700s, Giambattista Vico wrote about how human knowledge is based on imaginative constructs of experiences, which implies the person cannot be separated from what he/she presumes to know (Crotty, 1998; Mahoney, 2003). Vico emphasized that human knowledge must be understood as a process within the social and historical context in which it takes place. In the 1700s, Immanuel Kant, a philosopher, emphasized the importance of understanding that people cannot extricate themselves from their own experiences. Each individual carries a subjective view of the world, which includes thoughts, perceptions, emotions, and behaviors. This subjective reality is part of each individual, and travels with them as they experience and change in the world around them. In the late 1800s to early 1900s, Hans Vaihinger, discussed concepts such as “as if” and “functional fictions” (Mahoney, 2003). Acting “as if” involves individuals acting as they want to be, and “functional fictions” help individuals navigate through life’s circumstances and adapt to the changing environment. Vaihinger’s work influenced the 20th century constructivist, Alfred Adler (Mahoney, 2003).

Alfred Adler’s Individual Psychology is an example of a psychological constructivism viewpoint that is congruent with my theoretical stance. Adler’s approach

is described as a social psychology (Corsini & Wedding, 2000) which states that an individual's behavior must be studied within their social context. In addition, the meaning that each person ascribes to their experiences must be explored within their subjective reality, which is similar to the views of Immanuel Kant. In this study, the participants' subjective reality was not only always with them but was constantly changing based on the experiences they had. Each participant chose to integrate animals into their practice based on their values, and their beliefs that there was a benefit to having animals present in the session. As the participants experienced AAT, and participated in this study, their subjective realities were constantly evolving. It was expected that each participant in this study would have made some meaning out of their AAT experiences, and that these subjective interpretations of the experiences would contain similarities and differences.

Constructivism is viewed as "all knowledge, and therefore all meaningful reality is contingent upon human practices, constructed from the interaction between humans and their world, and developed and transmitted within an essentially social context" (Crotty, 1998, p. 42). This study focused on the constructed realities of the mental health/human services professionals who used animals in their professional practice, and on the meanings they created from these experiences. Within constructivism, there is social constructivism, which involves the social and cultural world in which we live. Each participant was born into a preexisting culture, set in a general and historical context. This study was conducted within the historical context of the 21st century in the United States of America. The USA has specific cultural contexts, which influenced how each participant viewed their world and AAT. A culture is created based on human

thought and behaviors, and the culture of a society directs behaviors and organizes experiences (Crotty, 1998). A preexisting culture provides a world of meaning, focusing on many different aspects depending on the humans' experiences and what they choose to focus on at the time. The participants in this study were focused on utilizing animals within their therapeutic practice as a tool to help their clients achieve treatment goals. There are many beneficial components which are unidentified regarding AAT. Their meanings are waiting to be discovered, the "truth" being from the perspectives of the participants.

The research goal of this study was to understand the experiences of mental health/human service professionals who used animals in their therapeutic practice. The main areas of exploration regarding each participant's subjective worldviews on animal assisted therapy were as follows: I explored what their values and beliefs about animals were and how that impacted their utilization of the animals in the therapeutic environment. I gathered information regarding their thoughts, feelings, and beliefs about what it was like to be an animal assisted therapist and how that impacted their professional career. They provided information about the important characteristics needed to facilitate the successful inclusion of animals into their practice, clients' responses to AAT, and some examples that illustrated the positive effects of utilizing animals in therapy.

The participants' concept of AAT and its effectiveness comes from their engagement with the realities of their world. A participant's reality is contingent upon the interactions between themselves and their world, and is created within a social context. Therefore, the participants in this study have constructed values and beliefs

about animals from their childhood. Their beliefs about AAT will continue to evolve based on their continued interaction between themselves, the animals, and their world. Thus, the meaning of AAT is constructed, not discovered, by the participants. They are constantly interpreting new information; there is no truth or valid interpretation, only useful interpretations (Crotty, 1998; Mahoney, 2003).

In qualitative research it is important to understand the researcher's specific world view regarding AAT and how it impacts this study. As the researcher, I have my own world view regarding AAT and the participants in the study. First, I believe AAT to be beneficial for clients receiving therapy services. Second, I believe the participants hold positive values and beliefs about AAT, or they would not have utilized animals in their therapeutic practices. Third, I believe the participants as children constructed positive beliefs and interactions regarding animals, and that these beliefs continued into adulthood. My world view impacted the questions that I asked the participants and the information that I hoped to gain by asking those questions. As I obtained new information from the interviews, my subjective worldview constantly evolved and impacted what follow up questions I asked the participants.

Methodology

The number of participants for a qualitative study varies significantly. Most qualitative experts suggest that the number of participants be determined by saturation and sampling for similarity and dissimilarity (Merriam, 2009). Saturation is reached when no new information can be obtained while collecting data (Denzin & Lincoln, 2005). Similarity and dissimilarity is when data from each participant are compared and any dissimilarity of data can be explained and understood through past research or

within-case analysis. For this study, saturation was reached with six participants, three licensed psychologists and three licensed master level clinicians.

For this study purposive nonprobability sampling was conducted based on the rationale of selecting a sample that would help the researcher gain the most understanding and insight (Merriam, 2009). In purposive sampling, the participants must meet several selection criteria in order to be selected for this study. The minimum requirement for all participants were that each holds a license in their respective field (i.e. psychologist, marriage and family therapist, professional counselor, clinical social worker) and that they used animals in their therapy practice currently, and had done so for a minimum of one year. The participants had to have participated in animal obedience training; animal assisted therapy training, or attended a conference/seminar on animal assisted therapy/intervention. Within purposive sampling, the participants were selected by network sampling (Merriam, 1998), where each participant was asked to refer other professionals who utilized animals in therapy. Network sampling was the most effective way to enlist enough participants for the study. Due to the participants living in different areas of the country, each participant participated in two phone interviews, lasting between 30 and 60 minutes.

Participants

There were a total of six participants in this study, all of Caucasian origin. There were three licensed psychologists, two males and one female, between the ages of 50 and 60 years old. They had a combined total of 70 years of clinical experience, of which 50 years involved utilizing animals in a therapeutic setting. For the purpose of this study, the licensed psychologists were assigned the names Adam, Katina, and John. They lived

in different parts of the United States from the West Coast through the Mid-West. They belonged to a variety of professional organizations including the American Psychological Association, Delta Society, International Society of Anthrozoology, American Association of Marriage and Family Therapists, and the National Speakers Association.

There were three licensed master level clinicians, all females, between the ages of 45 and 60 years old. Of the licensed master level clinicians, there was a licensed social worker, and two licensed mental health counselors. They had a combined total of 65 years of clinical experience, of which 35 years was utilizing animals in a therapeutic setting. For the purpose of this study, the licensed master level clinicians were assigned the names Lisa, Jennifer, and Susan. All of the master level clinicians lived in the Southern part of the United States. They belonged to a variety of professional organizations including the American Psychology Association, American Counseling Association, Equine Assisted Growth and Learning Association (EAGALA), National Association for Social Work, and Therapy Dogs International. The names of all the participants are fictional to ensure confidentiality. There was a combined total of 135 years of clinical experience, 85 of which involved providing animal assisted therapy to clients.

Procedures

After obtaining permission from the University of Northern Colorado's Internal Review Board (IRB), phone calls were made to potential participants. Two participants had already been identified prior to the start of this study as a result of networking and initial background research. The initial phone call provided the researcher the opportunity to describe the purpose of the study to the participants. Following participant

agreement, they received a written consent form (see Appendix A) and demographic form (see Appendix B) either by fax or email (per participant's choice) that was completed and returned to the researcher prior to the first interview. The written consent form and demographic form were either faxed back through a private and confidential fax number or emailed back to the researcher's private email address (per participant choice).

Qualitative interviewing was used as the research method for this study and is defined as an "attempt to understand the world from the subject's point of view, to unfold the meaning of people's experiences, to uncover their lived world prior to scientific explanations" (Kvale, 1996, p. 10). Qualitative interviewing allows the researcher to explore the participants' perspectives about the phenomenon being studied (Kvale, 1999). One reason why this researcher chose qualitative interviewing for the purpose of the study was to provide a meaningful context for the participant's perspectives on AAT. When analyzing the data, direct quotations about participants' perspectives on AAT provided the researcher with the ability to derive meaning from their experiences. Quotations "reveal the respondents' levels of emotion, the way in which they have organized the world, their thoughts about what is happening, their experiences, and their basic perceptions" (Patton, 1987, p. 25). Another reason was to explore the mental health/human service professionals' perspectives and integration of AAT into their professions. AAT is still a relatively new area of research, especially in regard to how professionals actually utilize the animal and how they document the implementation and success of the intervention. Exploration through qualitative interviewing may help identify new themes and future areas of research that have yet to be discovered (Marshall & Rossman, 1999).

A semi-structured interview guide was developed to help the researcher structure some of the interview and elicit information pertinent to the research question (see Appendix C). The interview questions were followed as a guide only to help the participants to discuss their process, perspectives, and beliefs about utilizing animals in therapy. The interview questions were open-ended and participants were encouraged to share their experiences and thoughts beyond that of the interview protocol. Participants were encouraged to share their opinions and views (Kvale, 1996).

The research question addressed in this study was:

Q1 What are the processes, perspectives, and beliefs about utilizing animals in a therapeutic environment from mental health/human services professionals?

The following guiding questions were used to direct the data collection processes:

Q1a What are participants' values and beliefs about animals, past and current?

Q1b What are participants' perspectives on the benefits of animal assisted therapy?

Q1c What are the important components of animal assisted therapy?

Q1d What are the benefits for clients who participate in animal assisted therapy?

Q1e What will animal assisted therapy look like in the future?

All interviews were recorded using a digital audio recorder. Each interview was transcribed by a transcriptionist who signed a confidentiality agreement, and who performed the appropriate deletion of confidential audio recordings and written transcripts. After the researcher received each hard copy of the interview transcription, the transcriptionist erased the audio recordings to ensure confidentiality was maintained. The researcher reviewed each transcription for accuracy by listening to the audio

recording and reading the transcript. Transcription errors were immediately corrected at the time of review. After each transcript was reviewed, the audio recording was erased and only the hardcopy was kept in a locked file cabinet. After the researcher reviewed and corrected the transcriptions, the corrected transcript was provided to the participants for their review. Each participant chose to correspond through confidential emails and provide corrections/feedback to the researcher if needed. The participants' feedback was integrated into the final transcript used for analysis.

Several steps were taken to help increase the level of trustworthiness for the study. First, each participant was provided with the emerging themes from the within-case and cross-case analysis for the study. Participants feedback was encouraged and all feedback received was analyzed and incorporated into the final analysis. Second, an expert check was completed by a practicing psychologist who is knowledgeable about psychology and animal assisted therapy. Member checking and expert checking provided the researcher with a way to verify findings, ensure validity of findings, and help meet the criteria of trustworthiness (Schwandt, 2001).

An audit trail was kept throughout the course of the study. An audit trail is a way to systematically maintain documentation in an organized manner (Schwandt, 2001). Components of the audit trail include; statement of theoretical framework, NVIVO 8, explanation of themes developed, memorandums, and description of procedures and analysis. Each participant's paperwork such as informed consent, demographic form, transcriptions, and email correspondence were also part of the audit trail.

A researcher journal was utilized throughout the study for the purpose of documenting the researcher's thoughts and feelings about the interviews. It was also

used as a way to reflect on what the researcher gathered from the interviews, and it helped the researcher analyze and interpret the data collected. The researcher journal is another component of the audit trail and is a systematic way of recording the researcher's journey through the process of the study. Both the audit trail and researcher journal were reviewed periodically throughout the course of this study. They were used to help the researcher develop the emerging themes for the within-case analysis and cross-case analysis, and to identify future implications. The researcher was able to access any moment of the study through the audit trail and journal and was able to recall thoughts, feelings, and ideas that were documented at that time.

Data Collection

The interviews were in-depth and in semi-structured question format. In-depth interviewing is designed to elicit deep knowledge about the participants' lived experiences, values and decisions, occupational ideology, cultural knowledge, and perspectives (Gubrium & Holstein, 2002). Interviewing allowed the researcher to grasp and articulate the participants' views and perspectives on a specific activity (e.g. AAT). The interviews were semi-structured in format, which allowed the participants to provide information based on their perceptions. The purpose of a semi-structured interview was to be able to explore a list of questions, in any order, and respond accordingly to the answers provided (Merriam, 2009). The flexibility of a semi-structured interview regarding AAT provided themes and experiences for some participants, while other participants provided new insight on their perspective of how AAT was effective. The core questions provided a needed structure, and allowed for a within-case analysis and cross-case analysis as well as interpreting the analysis and providing implications for

future practice. A total of 6 participants (12 interviews) were completed for this study. Saturation was reached when the last interview was analyzed and all of the participants responses could be explained as either a within-case or cross-case example, and was not interpreted as a new emerging theme.

Data Analysis

Analysis of qualitative researcher is an ongoing and continuous process, which begins as soon as the data collection begins. Throughout the data collection process, the researcher formulated questions, recorded thoughts and ideas in the research journal, and made connections between different pieces of information. The analysis was completed to help the researcher develop a holistic picture of the study and present this picture to others. The case analysis was based on several components; including interviews, member checks, expert checks and researcher journal. A two stage analysis was completed; the within-case analysis and cross-case analysis. Within-case analysis is identified as analyzing the interviews from each participant separate from the others. After the completion of the within-case analysis of the six participants, a cross-case analysis was completed. A cross-case analysis was when the researcher developed themes that fit for each of the participants but still have variability in the details.

Interview analysis included several major steps. First, each interview was independently coded. Coding was used for the identification of any themes or patterns in that data, which relate to the theory of AAT. Coding of the data was completed with the help of the NVIVO 8 qualitative software. The process of coding involved the separation of the data into smaller pieces of meaningful information, by labeling the smaller set with a qualitative description of the data. These codes were documented in a code list, which

allowed the research to remain focused on the intent of the study. The intention of coding data was to apply some meaning and organization to the data. A list of codes was developed, along with their definition, and specific examples from the transcripts. Once the codes were developed, the data were organized into larger categories to identify themes within the data. These themes became the findings of the study. After identifying themes for this study, a member check with each participant and expert check were conducted. Each participant completed a member check by reviewing the themes identified in the study. The member check was completed to confirm the credibility of the themes identified in the interviews, and to provide the participants with the opportunity to expand or explain any findings in the study. A psychologist performed an expert check by reviewing the themes identified in the study by the researcher. The expert check was another way to increase the trustworthiness of the study and verify the themes found.

The analysis of the interviews will be based on Wolcott's three stages of "analysis" (Wolcott, 2009; Wolcott, 1994). Wolcott's three stages are description, analysis and interpretation. Wolcott defined the first stage of description as letting the collected data speak for itself and treating the data as fact. For this study, the facts consisted of the participants' truths were co-constructed with the researcher. The second stage of analysis involved expanding or building on the description data collected above. This involved analyzing the data collected (transcripts) to identify common themes and threads. The third stage of analysis was the interpretation stage, which went beyond the data or themes collected. Analysis was completed to identify implications from the themes for current and future practice of AAT. The researchers' interpretations were

influenced by experiences, culture, values, beliefs, interactions, schemas, or any other influential aspects, which may have affected the interpretation of interviews.

Trustworthiness/Rigor

Trustworthiness is to qualitative research as reliability and validity are to quantitative research. Trustworthiness is defined as the ability to provide the audience with a high quality investigation and findings that are noteworthy. Lincoln and Guba (1985) described four different areas that trustworthiness should address. These are credibility, transferability, dependability, and confirmability. Credibility is the ability of the researcher to provide a good fit between what the participants provided and the researcher's reconstruction and representation of their views. Transferability is the ability to generalize the findings of the study to other professionals who utilize animals in their professions. Dependability refers to the researcher's ability to provide the reader with enough accurate information to identify, trace, and reproduce a similar study. Confirmability states that the researcher is able to make connections and interpret the data in ways that are clear and evident to the reader (Lincoln & Guba, 1985; Schwandt, 2001).

Several steps were implemented to increase trustworthiness for this study. These included member check, expert check, triangulation, audit trail, thick description, and generalizability. In this study, the internal validity should be high since the data are based on the participants' reality of their experiences and perceptions. This relates to Merriam's (2009) definition that what the participants reported as the truth is co-created with the researcher's perceptions, interpretation, and analysis of themes.

Trustworthiness or internal validity looks at the question of how the research findings match the participants' reality (Denzin & Lincoln, 2005; Merriam, 2009). In order to increase the trustworthiness of this study several steps were addressed. First is triangulation, which is the ability to analyze the data through more than one source. In this study, the sources were interview transcripts, member and expert checks, researcher journal, within-case analysis, and cross-case analysis. These multiple sources of information provided the researcher with different ways to analyze and interpret data (Gubrium & Holstein, 2002; Taylor & Bogdan, 1998).

An audit trail was kept during the study, which is a systematically maintained documentation system (Schwandt, 2001). The audit trail contained detailed records of data collection, study procedures, personal contacts, and researcher decision making throughout the study. The audit trail was used to create a timeline for the researcher to cross reference with journal entries and transcripts as themes were emerging. The ability to reference when information was gathered and what the emerging themes were at the time helped provide dependability to the study. In addition to the audit trail, a researcher journal was maintained. A researcher journal has three main purposes: It outlines topics discussed in the interview, replaces field notes, and records important information learned outside of the interview sessions (Taylor & Bogdan, 1998). The journal was used to keep track of these themes and to analyze the data that are collected. The journal replaced field notes by noting emerging themes, interpretations, hunches, and nonverbal expressions, which were essential in understanding the participants' meaning (Taylor & Bogdan, 1998). The journal helped the researcher by developing the themes that formed the basis for the within-case analysis and cross-case analysis.

A thick description was used to help the reader feel as if they were experiencing what was being described to them at the time (Creswell, 1998; Merriam, 2009; Schwandt, 2001; Stake, 1995). This study described in detail circumstances, meaning, intentions, strategies, and motivations present throughout the interactions between the researcher and participants (Schwandt, 2001). To complement a thick description regarding the use of animals in a therapeutic environment, several participants were used in this study. Multiple participants provided the reader with a variety of viewpoints and examples to help them understand and identify the ideas, themes, and reflections both within-case and across-case analysis.

A major component within trustworthiness is generalizability. In quantitative research it is similar to external validity “the extent to which the findings of one study can be applied to other situations” (Merriam, 1998, p. 207). Parts of this study may be applicable to other professionals who use animals in therapy; however, it is not valid for all professionals in the field. The participants’ answers were specific to their experiences, perceptions, and interactions as an animal assisted therapist. The applicability is dependent on the readers’ experiences and perceptions and how they connect to the information presented.

Regarding reliability, Merriam (1998) stated that it is “the extent to which research findings could be replicated” (p. 205). Although there were only six participants in the study, the study itself was well documented using an interview guide, transcripts, theme analysis, researcher journal, member and expert checks, and NVIVO8 software. This study could be replicate by other researchers to an extent; however, it would not be exact. The variability is due to the fact that each participant has had unique experiences.

Based on the semi-structured question format, follow up questions were then generated based on the participants' previous answers. If the participants answered the questions differently, then the follow up questions would be different as well.

Many quantitative researchers critique qualitative research as not being generalizable to other populations. Interpretations and meanings that are generated from a study can help the reader understand more clearly about the concept, themes, and implications that were discovered. The increase in understanding can help the reader generalize the study findings to similar situations that they experience (Lincoln, & Guba, 1985, Donmoyer, 2000). Qualitative research could also be looked at through "schema theory" (Donmoyer, 2000). The schema theory is based on Piaget's cognitive development theory. This theory involves the concepts of accommodation, assimilation, integration, and differentiation. The focus is on a person's schemas (cognitive maps), which are familiar to them. When new information is introduced to this person, they do one of four things: These things are accommodation, assimilation, integration, or differentiation. For example, an individual in this study will have a cognitive schema or map of what an animal is. When the participant acquires new information about an animal (i.e. as an adjunct to therapy), he or she must adjust their current ideas about an animal to include this new information. Because we all have cognitive maps/schemas, we all do the four types of cognitive functions mentioned above. Thus, a qualitative study provides rich information to the reader and the reader must process the new information, and either incorporate it into a present schema, or alter the schema based on the new information.

Summary

This study was developed within the theoretical framework of constructivism, which contained certain assumptions. One assumption was that each of the six participants' perspectives' was based on their subjective reality and how they have constructed their world view, which is embedded in the social context of their world. Another assumption is that the researcher has her own values and beliefs that have influenced the study, the questions that were asked, the data analysis, and interpretation. The six participants ages varied from 45 to 60 years old, and their years of experience were from nine years to over 30 years.

The researcher was the primary data collection instrument and the participants were recruited for the study using networking sampling. The interviews were based on an in-depth, semi-structured questioning format. The interview questions were a guide to help structure the interview process; however, this process allowed for flexibility and change in the direction and questioning based on the information provided by the participants. Interviews were used to arrive at an in-depth understanding of the participants' experiences, their values and beliefs about animals, the perceived benefits for the clients, and future implications for AAT.

The interviews were digital audio recorded, transcribed, and analyzed for recurring themes and concepts. The researcher's observations, interpretations, and impressions were another source of data and were recorded in the researcher's journal. The participants' past, present, and future perspectives about animals and AAT were explored. To understand how they thought the human animal bond was beneficial for

client in the therapy session, their perspectives on the benefits of AAT, important components of AAT, and values and beliefs about animals were explored.

Data collection and analysis were an ongoing process throughout the study. The transcribed interviews will be entered into the NVIVO 8 qualitative software program. The interviews were coded; emerging themes were documented and analyzed. The themes were analyzed both within-case and cross-case to determine when saturation was reached. Numerous steps were taken to increase trustworthiness of the study including member and expert checking, researcher journal, and an audit trail.

CHAPTER IV

ANALYSIS AND RESULTS

Introduction

No matter where a professional is employed (hospital, community mental health, juvenile justice, or private practice); animals may be integrated into the settings to promote the healing and well-being of humans. The animal-human bond can be a powerful component to a therapeutic relationship. This study explored six licensed professionals' stories regarding their perceptions of animals as part of the therapeutic process. Participants discussed the benefits the clients received from this intervention and the important aspects of the animal and the relationship that create change. The interviews with Katina, Adam, Lisa, John, Jennifer, and Susan are described below.

The participants ranged in age from 45 to 60 years old; they were Caucasian, and were licensed as either a psychologist, or a master's level clinician. They lived and worked in various parts of the country, from the west coast to the south. Table 5 describes participant demographic information.

Table 5

Demographic Information of Participants

Participants	Degree	Years in the Field	Years of ATT	Animal Type
Adam	Ph.D.	30	30	Dogs, other*
Katina	Ph.D.	19	8	Dogs
John	Ph.D.	30	10	Dogs
Lisa	LSW	30	20	Horses
Jennifer	LMHC	10	4	Horses, dog
Susan	LMHC	24	11	Dog, other

Note: Year in the field-number of years working mental health profession, years with animals-number of years utilizing animals for AAT, *other-birds, reptiles, fish, rabbits, etc.

Although the majority of the animals used by the professionals in this study were dogs and horses, they also used parrots, fish, lizards, rabbits, and other small creatures. Each participant discussed their values and beliefs about the animal-human bond, and described their journey of integrating animals into their practice. Each of their stories was unique, and is described in the within-case analysis. The within-case analysis section was used to provide each participant with a unique voice, and to provide the reader with the opportunity to understand their perspectives, beliefs, and past history with animals. Although there were a number of differences between the participants, there were also several themes that emerged that were shared across all participants. These similarities between the participants are described in the cross-case analysis section. The themes identified in the cross-case analysis were animal temperament,

metaphors/learning tools, documentation, therapeutic factors, and the benefits of AAT for clients and animals.

For the purpose of analysis, the study used the in-depth interviewing methodology to help the reader gain insight and understanding for each of the participants' journeys, and to provide perspectives on the utilization and benefits of AAT. The interviews were semi-structured in format, which allowed the participants to provide information based on their perceptions, and allowed the researcher the flexibility of asking follow up questions based on the participants' responses. The analysis for this study was a continuous process which began at the start of data collection. The analysis was based on several components, including interviews, member checks, expert checks, and the researcher journal.

The analysis of the interviews was based on Wolcott's three stages of analysis: description, analysis, and interpretation (Wolcott, 2009; Wolcott, 1994). Description is letting the data speak for itself, and treating the data as fact. For this study, the facts consisted of the participants' truths that were co-constructed with the researcher. Analysis involved expanding or building on the descriptions above, and identifying common themes among participants. Interpretation of the themes is when the researcher identifies what the relevance of the themes are, and how they can impact the current and future practice of AAT. The analysis for this study was completed using the NVIVO8 qualitative software, audit trail, researcher journal, and transcriptions of interviews.

An important aspect of qualitative research is trustworthiness, which is the ability to provide high quality and noteworthy findings in a study. An audit trail was maintained to provide a detailed record of data collection, study procedures, personal

contacts, and researcher decision making throughout the study. The audit trail was used to create a timeline for the researcher to cross reference with journal entries and transcripts as themes were emerging. A researcher journal was maintained to help outline topics discussed in the interview, and to keep track of emerging themes, interpretations, hunches, and nonverbal expressions, which were essential in understanding the participants' meaning.

A thick description was used to help the reader experience what was being described to them at the time. This study described in detail circumstances, meanings, intentions, strategies, and motivations present throughout the interactions between the researcher and participants. A major component within trustworthiness is generalizability, and how the findings of this study could be applicable for other situations or professionals. Given the unique experiences of each participant, the within-case analysis may or may not be applicable to others; however, the themes that emerged are consistent with current literature and can be generalized to other situations.

The research question addressed in this study was:

Q1 What are the processes, perspectives, and beliefs about utilizing animals in a therapeutic environment from mental health/human services professionals?

The following guiding questions were used to direct the data collection processes:

Q1a What are participants' values and beliefs about animals, past and current?

Q1b What are participants' perspectives on the benefits of animal assisted therapy?

Q1c What are the important components of animal assisted therapy?

Q1d What are the benefits for clients who participate in animal assisted therapy?

Q1e What will animal assisted therapy look like in the future?

Within-Case Analysis

Katina

Katina is a licensed psychologist and clinical director at a midsized university in the Midwest. She has 20 years of clinical practice, including 10 years of utilizing a dog in therapy sessions. She has been interviewed for television and radio programs regarding the use of animals in therapy. One of her dogs was recognized in the community for her work as a therapy dog, and received an honorable mention through the American Kennel Club, as well as being inducted into the Veterinary Medicine Association, Pet Hall of Fame.

As a child, Katina had different animals around her home; they were always a part of her life, and she loved having them. One memory she has involved her dog that slept outside in a dog house. The dog woke everyone up one night because he was howling so loudly. After taking him to the vet's, they realized that the dog had a four inch splinter in his gums. The vet asked if the dog had bitten anyone in the family, and when told "no", he appeared amazed that no one had been bitten, given how much pain the dog was obviously experiencing. Katina said that incident helped her understand and appreciate an animal's temperament and protective nature. "That was a very powerful experience ... the whole notion of attunement, and a being has empathy for another being. For my development it was very powerful but also recognizing that the empathy might come back the other way."

Katina grew up in the west, surrounded by a number of farmers, and although her family did not have a farm of their own, she observed how the farmers treated their animals with a great deal of respect and dignity. She described the farmers' relationships with their animals as being different than those they had with their household pets. Farmers viewed their animals as an integral part of their livelihood and knew that without them they would not be able to survive.

It's more fundamental and it's a relationship. There's no doubt in my mind about it, but it is different in that sense and it does have to do with needs that we have. You know, I'm just real grateful that when I was growing up that I knew farmers who treated their animals with a lot of dignity and respect, so that was always modeled, but the friendships were not the same.

Katina grew up understanding and appreciating the interdependent relationship between humans and animals. Today, her values and beliefs have grown to having a higher appreciation for animals, and trying to see the world from their perspective instead of her own. Along with this narrow perspective, she believes that humans present with a sense of entitlement and dominance over others that are not productive when trying to integrate animals into therapy.

You know I think what I have learned the most and what has changed the most for me, is to truly appreciate trying to see the world through the animal's eyes and not my own.... I think there's been a belief that somehow these animals are supposed to understand us but it needs to be the other way around as well.

The changes in her values and beliefs have led to a change in how she trains her animals. She has moved away from harsher training methods, such as jerking the leash, to more positive training methods, such as reinforcement with food and praise. Along with changing to more positive training methods, she has increased the socialization of her dog to include more diversity in regard to the different types of dogs and situations/settings it

is exposed to. She believes that all of the methods have helped her become a better therapist in regard to using her animal to serve a therapeutic purpose.

Early in her career, Katina started conducting research on animal abuse in relation to family violence. During this research, she came across Psychologists for the Ethical Treatment of Animals (PSYETA), also known as Animal Society Forum, which focuses on the ethical treatment of animals. This non-profit organization developed the AniCare model, which is a cognitive-behavioral intervention program for animal abusers that emphasizes the client's need to be accountable for their actions. In the process of utilizing AniCare with her clients, she was exposed to the different organizations and professionals who utilized animals in therapy. In order to utilize her dog at the counseling center at the university where she worked, she first had to create policy changes that implemented AAT. With the help of two university faculty members, both dog lovers, one of whom trained German Shepherds; AAT was adapted into the counseling setting.

Initially, Katina's exposure to the benefits of utilizing animals in therapy was by accident. Due to a scheduling conflict, she had to bring her dog into the office because of a veterinary appointment immediately following a session that day. The male client who was normally emotionally closed off suddenly opened up about his past, and losses he had suffered in his life. When speaking about this client's experience with her dog,

his demeanor with her totally changed. He was freer with her. He was very interactive. He wasn't as guarded and defended....I starting to ask him you know, "Do you have animals?" and "Did you have animals when you were growing up?" and "What was that like?" and he started talking about the dog that he had when he was a kid that he really, really loved and he was on a ranch, and the dog started chasing cattle and so his father shot the dog in front of him, and he started to cry and that's the first he cried about loss.

Once Katina adopted a more formalized animal assisted therapy protocol and procedure, the integration of the animal into the session became more systematic. During the initial contact with the client, she would discuss whether or not animal assisted therapy would be an appropriate intervention, and what the potential benefits could be for the client. She also discussed how the presence of the animal could create “environmental changes” and how these changes could be therapeutically powerful. She believed that discussing the implications of the use of animals is important in the therapy process, and helps set up the intervention to be purposeful and meaningful for the client.

I talk with the client about whether or not there could be a benefit to having an animal be part of the session, and what might that benefit be? And so we try to get as specific as we can about how that would matter in terms of enhancing their therapy, and so by the time they come back we’ve already established an agreement that she would be present.

During the first session, Katina would introduce her dog to the client and instruct the client on how to interact with the dog due to her multiple disabilities, which included muscular dystrophy and elbow dysplasia. These instructions on how to interact with the dog were to prevent the animal from suffering any unnecessary pain or injury. A few years later, her dog was diagnosed with cancer, which affected a number of her clients and their counseling relationship. Katina retired her dog due to the cancer, but later brought her back to have final termination sessions with clients she had worked with previously. She believed that the client’s ability to discuss the dog’s situation may have helped the clients deal with their own loss and grief. It is important that clients who are experiencing animal assisted therapy be given the opportunity to process their grief and loss regarding the death of the animal. Death of animals is an inevitable process that can

impact the client since through the course of the therapy the client has developed an attachment to the animal.

People were crying and talking about, you know, what a powerful impact that she had. She was part of my adult survivors of sexual abuse group and a real key part of that group. So a lot of the survivors came back and then other folks. I had clients who were on the floor talking to her, saying goodbye. So it was pretty stunning.

One of the biggest changes that Katina noticed after she implemented the use of animals at the counseling center was the increased connectivity between colleagues. “People would come and staff would come in to my office for breathers in between sessions, and come in to pet her and so I wound up interacting more with my colleagues as a result.” Besides an increased closeness with colleagues, she believed the clients benefitted from observing her nurturing her dog. She thought that observing her interacting in this manner with her animal, allowed her clients to perceive her as a more warm and approachable human being, rather than a guarded and standoffish professional. Several changes occurred for her clients when AAT commenced. She saw that her clients became more comfortable in disclosing personal information, and more willing to try new behaviors that they might not have been willing to try previously. The willingness to take more risks allowed them to be vulnerable in the counseling session and work towards completing their treatment goals. Katina thinks that the dog’s presence in session is always a helpful component, but the level in which the dog is involved in the session varies depending on the need of the client.

Further reflection from Katina indicated that she believes that animal assisted therapy has “not been a well-respected area in our profession.” She believes this is because humans’ relationships with animals have mostly been ambivalent ones, and that

animals are mainly used for research and not for emotional healing. Although she believes that the use of animals in counseling is starting to earn more respect due to the knowledge and understanding of how it works so effectively, she views the use of animals as “an adjunct. It is not necessarily a therapy in and of itself. It is an adjunct to the therapy that you are doing.” Along with continuing to offer animal assisted therapy to clients at the counseling center, she encourages students that are interested in pursuing AAT to gather information and a deeper understanding of the appropriate way to provide purposeful use of animals.

Adam

Adam is a licensed psychologist on the West coast, who not only has a private practice and also teaches at a local university. He has published a number of articles and books in psychology, some of which include the topic of animal assisted therapy (AAT). He has lectured on the topic of AAT across the country, provided professionals with training opportunities on the varying components of AAT, and suggested ways to integrate animals into therapeutic practice. Adam has over 30 years of practicing in the field of psychology, which has also included the use of animals. Over the years he has utilized a number of different types of animals, birds, reptiles, and fish, including three dogs, a lizard, a bearded dragon, birds, and several fish tanks. Having been interviewed on a number of occasions for television and newspapers regarding AAT, he has an in depth understanding of the intrinsic healing power of animals and how to best utilize them in the counseling setting.

Adam remembers the first time he brought an animal into a therapeutic environment, and that it was a serendipitous experience. He envisioned bringing the

animal in for the children as a “onetime deal,” but the children were so excited by the hamster that it became the program mascot. “They made a habitat for her, and when I would bring her in some kids would get to the program early because they wanted to hold her.” Since the first hamster visit, Adam has expanded his interventions to include a variety of animals and more purposeful interventions.

One clear distinction that is important for Adam is that he identifies himself first and foremost as a psychologist who happens to utilize different types of techniques in his practice, and that sometimes these techniques include the use of animals or reptiles. He holds firm in his belief that animals are “a tool that you use to get to the outcome”.

The key thing that I always explain to people is that I’m a psychologist that uses a variety of techniques with his patients....So when I began using animal assisted interventions; it was really used at first as a methodology that I thought would be helpful in helping me become more capable of connecting with my patients. So it was primarily for rapport. Over the years, of course, I have been able to understand other mechanisms of how to teach through using the animals alongside therapy.

Adam believes that the reason why this tool or intervention can be so effective is due to the human animal bond between the therapist and their animal(s), and without this connection the intervention would be greatly limited, if not completely ineffective.

Through the years, Adam has been able to integrate the use of animals from rapport building to a tool for learning and for facilitating positive changes for his clients. He stated that the use of animals is similar to a methodological approach of how to put a puzzle together: “You know a little bit about your clients, you know a little bit about what the client needs, and then you match what you do with what the client needs and that’s really crucial.” While many psychologists and licensed professionals use more traditional tools in therapy, such as board games, cognitive behavioral worksheets, or

activities, Adam has worked hard to transform his use of animals into a productive and effective tool. For some of his clients “the animals really might just act as a social catalyst, make kids feel comfortable when they come, but then they are not involved at all. Then with some kids they’re probably the most eminent part of the treatment.”

Adam emphasized that one of the ways professionals are doing a disservice to the growing popularity of AAT is the fact that we are not providing the public, through media channels such as television, newspaper, and radio, with the scientific information that’s needed to show the effectiveness of the intervention. The public is being exposed to more of the anecdotal information, or the animal assisted activity interventions. Although this information is important to help gain public support, it is not helping people understand the research and evidence behind the intervention.

I think there’s a lot of things that we tend to do that do convolute what we do because we make it sound as if we don’t really understand why this is even happening and the reality is, getting a good form of therapy, we should know what we are doing to help make that impact. So I think we need to be a little bit more serious in regards to explaining animal assisted interventions and look at how we take advantage of the human animal bond.

Furthermore, Adam believes that although professional organizations, such as Delta Society and Therapy Dogs International, promote the use of AAT and animal assisted activities (AAA), they are also helping to convolute the matter because they are focused more on AAA promotion and training. He believes that we are in need of more organizations that focus on teaching and implementing animal assisted therapy skills, not activity skills.

Adam’s training comes from a scientist-practitioner model, and he believes that the psychology profession needs to bridge the gap between clinical practice and sound research. Bridging the gap between practice and research will help professionals

demonstrate the effectiveness of AAT. He states that even though the primary goals are different between a clinician and researcher, professionals must find a way to bridge the gap, demonstrate the effectiveness, and share the results with others to help promote the importance of AAT.

I think that one of the real challenges with animal assisted therapy is that there is very little empirical evidence. But there are some ways to breach clinical research with clinical practice, because you know we still have to document when you're working with patients that are making a change. And so there are scales, empathy scales; there are other measures that I've used too.... If the client's not coming there for research, then you owe it to the patient, of course, to you know to treat the problem, not to treat the research issue. One of the difficulties in animal assisted intervention is the fact that there's such a chasm of where there has not been enough data around to support the efficacy of what we're talking about.

Adam discussed one of the ways in which professionals can bridge the gap between anecdotal and evidence based research by addressing the need for levels of proof. He stated there is an inherent difference between epistemological and metaphysical evidence. The epistemological framework requires empirical proof, whereas the metaphysical perspective knows that something exists but there may not be proof. He believes that the metaphysical evidence can create a variety of problems because there is no proof behind what one might know. Furthermore, he suggests that researchers and clinicians need to come together to develop clear expectations, guidelines, and protocols to document the effectiveness of AAT.

Adam believes that professionals in psychology need to start changing society's perceptions, and expose the public to the more research based animal assisted therapy interventions. There needs to be less focus on anecdotal commentaries, especially the sensationalism that has been associated with "the love and the importance of the human-animal bond." Adam acknowledged that sometimes the way in which we present

information to the media does more damage, and limits peoples' understanding of what is really transpiring in the human-animal relationship.

When you look at even books like "Marley and Me," John Katz's book, "A Dog of a Dog," you know these are books that are the popular press books that are really selling.... What we find is that these books actually, you know, we are entertaining the mainstream societies' perceptions.

Adam is a well-known psychologist to many who are seeking advice and expertise on the use of animals in therapy. Throughout the interview, Adam chose to focus on the future of animal assisted therapy and how it impacts professionals. Although he is sought out for his expertise, he "never made the claim to fame that it was only the animal assisted therapy that made the difference." Over the years, he has redefined the best way to utilize the animals for the benefit of his clients. He believes that his therapy practice is clinically sound, and that his clients receive the benefits of AAT. One of his biggest goals at this time is to find a way to bridge the gap between practice and research so that we can elevate the use of animals to a more respected level in our field.

Lisa

Lisa is a licensed clinical social worker with over 30 years of clinical experience, including 20 years of utilizing animals in therapeutic settings. She provides therapy services through her private practice in southern Florida, as well as grief counseling at a local community counseling agency for cancer survivors and their families. In the past, Lisa used a variety of animals to help facilitate therapy groups; however, for the past few years she has utilized her dog, Abby, and has stopped working with a variety of different animals.

As a child growing up, Lisa remembered always having a cat to play with even though she was allergic to them. She also remembered trying to rescue a lot of the injured animals in the neighborhood, and “anytime I found an injured bird or animal, I would bring it home and attempt to nurse it back to health and release” it. Lisa has always believed that animals are sensitive creatures that can feel different emotions such as love, pain, and happiness. Because they depend on humans for survival, it is our responsibility to make sure we take care of them and keep them happy and healthy. She remembered listening to Jane Goodall, a leading expert on chimpanzees; speak on this very subject many years ago. Although Jane Goodall applied this to chimpanzees, Lisa believes it applies to all animals living in captivity. Jane said something to the effect of “if we’re to keep them in an unnatural environment, then we are responsible for making them as happy as we possibly can”.

Lisa started using animals in therapy after attending a Delta Society annual conference regarding AAT and AAA, and realizing she could combine her love of animals with her career in psychology, and in the process have it be a pleasant therapeutic experience for her clients.

I was just blown away by all these animal lovers and people who were doing research on the human animal bond, the benefits of it, and it’s not that I had experienced it myself, but I realized that I could use animals so that I would get to be around them, but also use them in my work.

Lisa believes in the healing power of the human animal bond. For her, the mere presence of her dog in the counseling room creates a warm and safe place for her clients. Her dog will interact with the clients at the beginning and end of the session, but otherwise does not interact or do specific interventions. Lisa stated that for the “people who have positive associations with animals, having an animal present can help bring out

those feelings” of safety which can help facilitate the therapy process. Since her dog is an addition to her therapy work, it is not a key component, but an added benefit.

Her dog’s role at the community center for cancer survivors and their families is similar to its role in her private practice. The community center wants to provide a warm, safe, home like atmosphere where the clients feel welcomed and comfortable. Her dog Abby’s goal is “to greet people and provide a safe, pleasant topic when people are coming in to talk about a really scary, serious thing.” She believes that her clients view her differently because her animal is present, and that “people see me taking good care of her, so they, I think most people assume that someone who loves animals is a safe person and likes people.”

One of Lisa’s first experiences working with animals came when she facilitated a therapy group for children who were on an inpatient psychiatric unit at a local hospital. Each week she would bring in a variety of different animals, including a guinea pig, a parakeet, a Macaw, a rabbit, and a cat for the children to interact with while participating in group. She felt that one of the biggest challenges was the dedication and time commitment she had to make without any monetary compensation. Some of the animals she borrowed from her friends, so she had to transport the animals to and from the facility. There was also extensive set up and cleanup involved with the animals, which took a lot of time and energy. During the group she also had to monitor all of the children’s interactions with the animals, and run a therapeutic group successfully with no additional adult support. Although there were a number of extra demands with this particular group, she facilitated it for several years with the animals because she observed the benefits the animals brought to the children.

Lisa observed the healing power of animals and how attuned they can be to the needs of humans on many occasions. One such example was:

There was one girl in the hospital who was crying and talking about how bad her self-esteem was, and how she didn't want to live sometimes and I had the borrowed parrot, a blue and gold macaw. She had him on her shoulder and he reached, bent down and said something to her and her eyes got big, and she got this smile on her face and she said, "He said I love you," and so I think that was an instance of a parrot being attuned to the person.

Lisa believes that one important thing that is missing in today's society is the connection that humans have with the natural environment. She believes that people have lost this connection because of the physical and emotional distance they create between themselves and the environment. She believes that one of the ways people are trying to get this connection back is through animals. By having her dog present in the therapy sessions, she believes she is helping her clients make emotional connections. She believes the presence of her dog "I would say for some clients it's a tremendous benefit. To probably half of my clients it's nice."

Although Lisa's dog has remained more on the periphery than as a main therapy intervention, she believes her animal provides a benefit to her clients. This added benefit enhances the therapy process, and may contribute to a successful therapy session and outcome. In the future, she will continue to have her dog present in session. Recently, she added two kittens to her personal household as companions for her dog, and several of her clients have requested the cats come into session. It appears that for some of her clients the cats have added benefit and comfort to the therapy process.

John

John is a licensed psychologist who currently practices animal assisted therapy in the Midwestern part of the United States. He has 29 years of counseling experience, with

over 10 of those focused on the use of dogs in his private practice. He is well known in his community for his work with children and adolescents, and he was been sought out because of his animal assisted therapy work. Several medical doctors in his community have referred patients to him specifically to deal with animal phobias.

John had many animals while growing up including a guinea pig, wild squirrels, a raccoon, a chipmunk, mice, and turtles. His “true love” were always his dogs: a Schnauzer until he turned 13 and then a Springer Spaniel until he went off to college. His dog was always there for him, whether it was to greet him when he came home from school, go for walks, play in the woods, or just hang out and watch TV. Growing up, he wanted to make sure his dogs were happy, and that they felt like they were part of the family; leaving them outside and tied up was not an option.

Today, he still has a deep love for his dogs; they are part of his family and influence important decisions that he makes, such as a purchase of a new car, and where to take family vacations. Over the years, he has gained a deeper understanding and appreciation for the dog’s ability to heal others. He believes that people do not “give dogs enough credit for what they know, what they sense, and their desire to care take and sooth and comfort.” He is also outspoken in regard to those that abuse and neglect animals, believing it is unjust and inhumane.

John’s start as an animal assisted therapist came by accident. About 15 years ago, one of his German Shepherds suddenly died, which left his other dog lonely and grieving. He decided he couldn’t leave the dog home alone all day without a companion, so he started to bring him to his workplace. What started out as love and concern for his dog ended up drastically changing his days at work. People started to come up to him,

wanting to pet him and talk to him. “I had the same response from the kids, the families and the couples that I was working with. So what I realized was that there was huge value and benefit in a dog helping me with my work.” The integration of his dog into the counseling sessions happened by accident, but his dog was already well trained, not through Delta Society or similar training, but through a more advanced training. His previous dogs were trained through “Schutzhund,” a specialized training program that police officers use for their canine partners. Although his dog was not trained for the protection component, he was trained for the high level of obedience. John has taught his dog a variety of different types of skills, along with reading “volumes and volumes of material about dogs, about training, plus we watch television shows that have to do with training of dogs and temperament and all of that.”

John believes that his dog is one way to break the barrier with resistant clients, especially with children or teenagers who do not want to talk to a therapist. He brought up an example of a reluctant teenager who initially did not want to speak to him:

The parents were convinced he would not talk to me...when he came in the other day I asked him, I said, “So did your parents have to drag you back screaming and yelling?” And his response was, “No after meeting you and your dog I think you’re both pretty cool.”

Along with utilizing his dog with resistant clients, he also uses him for children being treated for Attention Deficit-Hyperactivity disorders, Impulse Control disorders, and/or Asperger’s syndrome. His dog helps these children learn how to connect to others, build relationships, and read social cues. He believes animals are helping teach these skills, because no matter how awkwardly the children might interact with the dog, he will “care for them back.” John gets “amazing feedback from these parents about how much better these kids get socially.” Parental feedback is important because then he has

a better understanding of how much the children are transferring what he is teaching in his session to the world outside of the therapy session.

Another example of his dog's impact on clients happened several years ago with a four year old boy who was fearful of numerous things, such as lightening, thunder, dogs, cats, Halloween masks, and anything on TV that appeared scary. His therapy dog was instructed to keep his space from the client, and after six or eight sessions, the young boy

would sit on (the dog's) bed and actually pet him and as a function of overcoming his fear of (the dog). His parents told me that he overcame his fear of all these other things that were scaring him.... It's a mixture of (the dog) caring for him, soothing him, helping him overcome that fear that is generalized across the board.

John's dog is well trained, and they have an interesting and unique start to each session. Once the client(s) are seated, his dog is instructed to "make friends", at which time his dog will greet each person with a paw shake, and then he gets a treat in return. Once introductions are made, he will either return to where John is seated, or will go and sit by a particular client. If he goes and sits by a client, then John understands that his dog is concerned about this particular individual. If John is concerned about a particular individual, he can instruct his dog to make a connection with him/her, if the dog has not done so already.

In addition to his view of animals as amazing creatures with an innate ability to heal others, John said that professionals who are integrating animals into their practice need to truly care about the animal. They need to be an animal lover at heart, and not just use the dog as a ploy or gimmick to get more clients. In contrast to other subjects who were interviewed, John does not look at his dog as a tool, but as a family member to be admired and respected.

I look at him as one of my family members and I feel very protective of him.... Now I realize that dogs have a very healing presence, and they really do try to heal and help and soothe and care take, and I think they do that more intuitively without even being trained to do that. So I guess I just have a lot more of a respect, I mean I've always had respect and loving for animals. Maybe the correct word is more awe for animals, more awe for dogs in terms of what amazing creatures they are.

His dog is a main component of his current practice; however, there are times when his dog is not needed and John will instruct him to go lay down. One example is when conducting a feedback session for the parents, but another instance stems from safety concerns. John stated there are times when he is concerned that the client is "mean spirited or cruel," at which time he will be the buffer between the client and his dog. Fortunately, this is a rare occurrence. John's dog is a caring and sensitive creature that is always ready to nurture others. However, at the end of the day, he is reintegrated back to home and relaxation time. John has a ritual for this as well: After dinner, the dog will grab his favorite bone or toy and play with him.

John has noticed an increase in the presentation of animal assisted therapy to the public, and in the exposure it is receiving through different media outlets. Recently, John was asked to present at an international science festival on the therapeutic benefits of animals, along with other professionals who were reporting on the physiological benefits. He also came across an article in the newspaper that discussed the benefits of utilizing animals in a juvenile detention center. He stated that several schools in the area have implemented the R.E.A.D. ® program (Reading Education Assistance Dogs) to help improve the literacy skills of children (Intermountain Therapy Animals, 2000). He is pleased with the new attention that animal assisted therapy is receiving in the media, especially since it is focusing on more evidence based research and interventions.

John believes that not only does his dog need to have basic obedience training and socialization skills, but that he needs animal assisted therapy training to help him become more skilled in this area of intervention. John expressed some frustration in regard to the lack of training for AAT that would meet his state's licensure requirements for his PhD. A few years ago he was able to attend Dr. Fine's conference on AAT, but has struggled ever since. Although "being a pioneer in the field is kind of cool, but at the same time it's very stressful and it would be a lot nicer if you could just pick up a book and just read do this, this and this." He is hopeful that sometime in the future more trainings will be available to professionals to help them expand their knowledge of AAT, learn new interventions on how to use the animals in session, and meet the continuing education requirements for Ph.D.s.

Jennifer

Jennifer is a licensed clinical social worker who has worked in the field for nine years and has three years of experience working with animals in a therapeutic setting. Initially, Jennifer had her dog trained through Therapy Dogs International and provided animal assisted therapy at a local community mental health center. At her new place of employment, she is not allowed to bring her dog to assist in therapy sessions, so she has started a private practice where she can do animal assisted therapy. In her private practice, she has the option of utilizing her dog, or horses. She is currently working on completing a level two certification through Equine Assisted Growth and Learning Association (EAGALA).

Jennifer remembered fondly about her childhood experiences with animals, and how she would bring home lots of stray animals to heal and hopefully keep. She had

several dogs that were a very important part of her childhood and her constant companions. Many nights she would travel to the local park with them, and while she did her homework they frolicked in the stream nearby.

They were my best friends. They were the ones that I would talk to when I was upset, when I was happy. It didn't matter. They were just the ones that I would confide everything in and they gave me that unconditional love and just listened to me and let me cry on their little fur.

Although she did not have horses growing up, she remembers being fascinated by them at an early age. She would ride her bike a mile and a half down the road to watch her neighbor's horses in the pasture. "I just thought they were always big and beautiful and like a free spirit, and it just captivated my attention."

Jennifer believes that animals deserve to be loved, respected, and cared for by humans. Her values haven't changed much since childhood, except for a deeper appreciation and understanding of the "power" the animals have, and seeing "what they can do for people emotionally and physically." She cannot imagine her life without animals, and dreads the possibility of a day when she has to be placed in a nursing home and cannot have her animals with her. Her belief about animal assisted therapy is that it is a tool that you utilize to help the client achieve their treatment plan goals. "You're still going to work with people on whatever treatment needs they have, and so whether it be with horses or with work books or with any other kind of tool you can find, you're still going to pick the right tool for that client based on whatever their current issues are."

Jennifer first came across the use of animals as a therapeutic intervention when she met other professionals who used dogs in therapy sessions. She signed up with the local Humane Society, and decided to volunteer and do animal assisted activities at local facilities (e.g., nursing homes). Even though she knew first-hand the immense value of

animals in people's lives, her experience volunteering broadened her understanding of these benefits. After her initial experience, she increased her exposure and knowledge on the subject. She went on to complete her master's internship through the North American Riding for the Handicap Association (NARHA). Although she enjoyed her internship experience, she wanted to find a program that would help her combine therapeutic services with animals, and came across EAGALA.

In therapy sessions, Jennifer uses her dog and horses in very different manners. When utilizing the dog in a therapy session, Jennifer will let the clients decide if they want the dog present or not, and based on their reaction she decides whether or not to bring them into the session. If the dog is present she may use metaphors, or point out how things are similar or different from other sessions to the client. With the horses, the introduction and use of the animal is much more purposeful. The clients are aware and have sought out the use of an equine facilitated therapist. Jennifer will answer questions, explain the use of the horse, and the client will be given exercises to complete based on their presenting problem/concern. Jennifer believes that anybody can benefit from the use of animals in the therapeutic relationship. "It's just how creative you can be with exercises to address the individual's particular needs." Although she believes anyone can benefit from animal assisted therapy, she chooses to not have her dog work with clients with a history of animal abuse for fear that her dog might bite them in trying to defend herself from getting hurt. A unique aspect of her work utilizing horses is that the clients are not told of the horses' names; the client chooses what to call the horse so that there is no positive or negative association with his name, and they can start interacting with the horse with no history or recollections of past events.

Jennifer believes that her animals are aware when it is time to do therapy with clients, and what their role is supposed to be. For instance, when Jennifer is ready to take her dog to work, they have a designated therapy bag with all of his essentials. Upon seeing the bag and the leash, the dog gets very excited and starts jumping and barking. She believes the horses are aware as well, because they enter the arena and “know that’s their job and they know they’re going to do it and you can just tell that they enjoy it.” Although she could not define exactly how the horses know what they are supposed to do, she has yet to have a problem with any of the horses refusing to be part of the session.

Unlike other participants in this study, Jennifer has experienced some roadblocks in regard to professionals and organizations being unwilling to allow animal assisted therapy in a facility.

Most places will let you go outside of the box and do different kinds of therapies, but I have not found anybody yet that will let you do animal assisted therapy because they’re concerned about law suits or anything like that, so I think the biggest struggle is really their close mindedness.

She believes that if more professionals were willing to allow animals into their organizations, they would be able to see the therapeutic value of having them be part of the session. As long as they were trained and had liability insurance, the fear of lawsuits would be greatly diminished.

Susan

Susan is a licensed mental health counselor practicing equine facilitated therapy in Florida. She has over 24 years of experience in the mental health field, 10 of which involve the use of animals in a therapeutic environment. Over the years she has been involved with a number of organizations that promote therapeutic change using animals. She started by volunteering at a handicapped riding program, and helped the organization

develop a parenting curriculum to coincide with the client's riding program. Two organizations that she was involved with were the Equine Facilitated Mental Health Association (EFMHA), and Equine Assisted Growth and Learning Association (EAGALA). Susan has participated on the advisory board for several organizations to help define equine facilitated therapy, and to implement effective therapeutic interventions, professional trainings, and define ethical standards. She also was the Clinical Program Director for an equine facilitated therapy organization, oversaw the mission and vision of the organization, and helped deliver quality care to the clients.

Susan grew up on a farm in the West, where several generations of her family were homesteaders who worked with animals to make a living, specifically horses, cattle, and livestock. As early as she can remember she was involved with animals, getting her own horse at the age of 4, and participating in organizations such as 4-H club and Future Farmers of American (FFA). Being involved in these organizations and around animals all the time helped shape her worldview. It also helped her understand life's questions from the perspective of animal husbandry (breeding and rearing farm animals). Although the "horses were very personal, the family outlook was that they were working partners" and even though they were used for personal and recreational use, that was not the overriding purpose. Interacting with the animals taught her many valuable lessons,

understanding my sense of balance when you have no saddle and rigging, and a horse gets spooked and starts to spin, and understanding that if I can maintain my mental balance and allow my body to relax, I can stay in that center of gravity and be okay even while things are going very fast around you.

Being able to draw on these experiences in different contexts later in life has been helpful on both a personal and professional level, even if she did not realize what she was learning as a child.

Susan believes that each animal has a job to do, and that they are respected for their job function. Animals are a source of food, income, or are used for working on the farm. This relationship with the animal is not only a link to her heritage, but provides her with a unique perspective in comparison to individuals who utilize horses for recreational purposes only. Susan believes there is a difference in the perception of the use of horses based on geographical location. She reasons that the east coast has less of a dependence on animals, and they have developed more of an emotional connection to the point of enmeshment, whereas the farmers have more of a practical relationship based on interdependence. Susan compared farmers' relationships to animals to family relationships, and noted the difference between healthy and enmeshed: "There was healthy distance between their animals and them, much as I see a healthy distance between parents and children, and when the boundaries get blurred it makes it difficult for both". Susan's values regarding animals have not changed much since childhood; she still believes it would be best if we could see what the animals are useful for, and respect that relationship.

While enrolled in her master's program, Susan started to think of ways she could integrate her love of horses with her therapeutic practice. When she asked her professors for guidance in this area, she would get brushed aside and told that it was her anxiety about being in the office with a client. Susan knew it had nothing to do with anxiety, and wanted to bring the benefits of animals to clients. So she started to explore experiential programs that focused on the use of animals and nature to bring healing to others. Eventually she came across EAGALA and received equine facilitated therapy training. One of the most important aspects of being an effective therapist is to have a solid

theoretical foundation, and to understand that the use of animals is not a therapy in itself but “a mode of therapy.” A solid theoretical foundation will not only help you understand how you conduct therapy, but is “a way to interpret what you see or how people are functioning.”

As much as I enjoy being around horses and think that it's been a great personal growth, as a professional, as a therapist I have an ethical responsibility to have some kind of theoretical underpinnings and model of what I'm doing and why I make certain choices when I do, and it has to be for the good of the client. If I don't have a theoretical grounding, then standing out there in a group of horses and watching somebody walk around, I'm not doing anything as a therapist.

Susan focused a lot on the concept of respect, and how the therapist needs to respect the therapeutic process, and the use of the animal as a tool. The therapist also needs to respect what the client brings to the therapy session, e.g., fear of horses, or distancing themselves physically from the horses. We need to respect the client's process of when they are ready to work with the horses without a barrier between them. Both the client and the horse have the choice to interact with each other during the therapy session, and these choices lead to some of the “richest interactions” in a therapy session that she has seen.

Susan believes a key component of the success of EAGALA is that the mental health specialist and the horse handler work as a team to provide an experiential therapeutic service to the client. The therapist and equine specialist communicate during and after the session about what transpired between the client and horse. Susan expects that the equine specialist will know a horse, or herd behavior, well enough so she can concentrate on her client. She also expects strong communication with the equine specialist so they can discuss completing or holding off finishing an exercise due to a horse's response.

I may know that with that particular client at that moment that we are so close to something really big emotional safety wise, that I cannot, this is not the time to change things. Do not interrupt that experience. So there has to be some trust there. There has to be that kind of working relationship where I can say, 'Can you wait, can you wait, can you just wait just a minute?' This is huge for this client. You know we have to balance emotional safety with physical safety, and I think when you're working with a large animal everybody's view gets physical safety.... So you know it's a very fine balance between emotional and physical safety, and I think that's something we often overlook in the office.

Susan recognized that although she may only be seeing one client for a therapy session, she is always conducting group therapy sessions. This is because there are at least three people involved in the session, a therapist, a horse handler, and a client, as well as a horse(s). She has researched group psychotherapy that demonstrates the effectiveness of the intervention, and thinks that it can be applied to equine facilitated therapy as well.

I'm always doing group work. You know, or at least I have a dyad even if I have an individual that has chosen to work with one horse, and even if that one horse is in a separate pen, you know the rest of the herd that horse pays attention to, so there are these outside influences that are coming in.

Susan cautions other professionals about the pitfalls of becoming isolated from colleagues. She believes that professionals who work only in private practice can become isolated and stop actively seeking supervision, which she believes could lead to a "rut or their focus may become narrow." She believes this can happen to equine facilitated therapists as well, so not only is it important to process the session with the horse handler, but it is also important to seek supervision, consultation, and mentoring with other equine facilitated therapists. "I think you need to have a range of people to consult with, no matter what kind of therapy that you are doing."

Susan believes that equine facilitated therapy can be beneficial to clients; although the benefits cannot always be seen, they are experienced by the client. One

such example involved a young girl who sat removed from several equine facilitated sessions, and did not interact with the horses or people. At the end of a session, the equine specialist apologized to her for not getting anything from the sessions.

She was very indignant and very upset with him and she said, 'How can you say that?' And he said 'Well I just noticed you didn't do anything or interact and you didn't connect with any of the horses.' She said, 'Yes I did.' And he said, 'Well which one?' And she said, 'The one over there' which was outside of their perimeter, outside the fence. It had been there every time she had been there. He said, 'What do you mean?' She said, 'She sees me.' And he said, 'What does she see?' She said, 'She sees me. She knows me and you don't.' So every time that she had been there that horse had stayed where she could see her. And to the equine specialist it was profound. The next session she revealed that what she believed what the horse knew was that she had been cutting and self-mutilating the whole time and hiding it beneath her sweatshirt, and so she revealed it only after three sessions where she really felt somebody was seeing her the whole time. So it didn't matter that that wasn't the horse that was chosen for her to work with or that she chose, it was the horse that she believed had a connection to her. It wasn't even in the arena.

Another key component to the effectiveness of equine facilitated therapy is that a therapeutic relationship is being developed, but it might not be between the therapist and client. "It may be with the equine specialist, or with a particular horse. And you have to be able to handle that." Overall, Susan has focused her interactions with the horses based on a mutual respect and understanding of their power and purposefulness. She believes in their healing power, even if it cannot be seen by the professionals. Finally, it is important for professionals to remain connected to other individuals to avoid becoming isolated and narrow minded in their therapy focus.

Within-Case Summary

The participants were selected through nonprobability sampling, specifically networking. They were all at different stages of their careers, and utilized a variety of animals in their own way. Although their values and beliefs about animals were

different, a theme for all is the love they have for animals, and their deep understanding of animals' healing power. While growing up, some focused on rescuing strays and injured animals, while others were content to interact with the family pet or farm animals. Several of them accidentally discovered the benefits of utilizing an animal in a therapy session, while the others were more purposeful in their quest to integrate animals into practice.

Adam is an educator and practitioner who is trying to educate others on the use of animals as a therapeutic intervention, and bridge the gap between research and practice. Katina is also an educator who is mentoring future practitioners in animal assisted therapy, and using her dog in sessions. John is a practitioner who is focused on promoting children and adolescents' well-being. Susan's journey has led her to help create stronger guidelines and ethics for organizations who want to provide equine facilitated therapy services. Lisa and Jennifer are practicing clinicians who use their animals to varying degrees. Lisa's dog is more on the periphery, but creates a warm and inviting atmosphere for her clients. Jennifer uses her horses in every session to structure activities and interventions which help the client work towards achieving their therapy goals.

There are some significant differences in the way these professionals view animal assisted therapy, and how they approach the use of the animals in session. In the next section, the cross-case analysis will be used to describe the prevalent themes among the professionals.

Cross-Case Analysis

Although each of the six participants had different childhood experiences and beliefs about animals, they also shared some commonalities. Five themes emerged from the data of the study that were similar among the participants: animal characteristics, metaphors/learning tools in AAT, written documentation, therapeutic factors in AAT, and benefits of AAT for clients and animals. Each of the themes are described below.

Animal Characteristics

Katina has integrated two dogs with very different personalities/characteristics into her therapeutic practice. Her first dog had several disabilities, and also had a calming and gentle presence around others. She believed those two qualities, plus a strong sense of character, was a powerful combination for her clients. Katina reflected on the fact that this dog was “very focused on people and attentive to them.... She would recognize who was in the most distress, and she would lay next to them.” Her current dog, which she is now training, brings a different type of energy to the room. This might be due to the fact that this new dog is relatively young compared to her other one, and has fewer health problems; or it might be due to the fact it is a larger dog and a different breed.

Katina believes that an animal should have certain characteristics/temperament to be an effective addition to the therapy process. “Obviously the skills of being obedient and being really attached to the handler I think is important, just because you need to always have control. You can’t always predict what might happen in a session.” Besides the basic obedience skills, she believes that an animal needs to be minimally distracting in session, patient, and have a high level of tolerance to client behaviors, such as shouting

or being highly emotionally reactive. Some qualities that she thinks are not conducive to an animal's being effective in therapy are extreme shyness, lack of confidence, and preferring to interact with other dogs and not people.

Having worked with both horses and a dog in therapy sessions, Jennifer believes there are a number of characteristics that are important when conducting animal assisted therapy and equine facilitated therapy. Her main focus is on equine facilitated therapy, and she discusses several key components of this. Jennifer believes that an animal should show unconditional love with the client, and not reject them based on a client's expression of negative emotions. Along with unconditional love, the animal must be free to be themselves and interact in a genuine and real manner. Especially with horses, "they're going to treat you according to how you're acting.... A horse is not going to hold back and so it's going to allow that person to process." This is allowed within reason, as the physical safety of the client and animal are a priority. Several characteristics of an animal that are not beneficial in session include animals that are physically aggressive (biting or horses that kick people). Although many animals are not physically aggressive, there are animals that are "pushy," especially with younger animals that are learning the rules and guidelines of acceptable behaviors. They might push their way around instead of following the therapist's lead.

Although Lisa's dog is more on the periphery of the therapy sessions, and is there to provide a warm and home like environment for her clients, she still believes that an animal must have certain characteristics to participate in the session. Animals should be playful or charming, and have "a gentle temperament and an interest in interacting with people." She also thinks that an animal that has physical features such as being cute or

“baby like” is important. She stated that many clients, when they are initially introduced to her dog, report on how cute she is, and talk to her dog in that “baby like” voice. After bonding with the animal, they will then say hi to her and start the therapy session. Lisa believes there are several characteristics that are not beneficial for an animal to have, such as being physically aggressive, easily frightened, skittish, or fragile in a physical sense.

Susan has worked primarily with horses conducting equine facilitated therapy, but regardless of the type of animal, she feels there are several important characteristics to consider. She believes that an animal should be trained and able to follow the therapist’s lead, however, they should “not be trained to the point where they can no longer be themselves.” She feels this is an important piece, and that although the animals are under control, they should not lose part of their personality or their freedom to make independent choices. Allowing the animal the freedom to make choices is relaying a level of respect for the animal.

Respecting them enough to let them be themselves, and having enough respect for them to not put them in a position where they have to defend themselves, and not to put your client in the position to where they are unduly frightened.

Similar to the other participants, Susan believes that an animal that is aggressive toward other people is not therapeutic, and is a safety concern for the client, as well as a potential liability concern.

John has personally trained his therapy dogs for years and besides being adequately trained, he believes they should also be easy going, calm, gentle, loving, intelligent, and intuitive. Animal characteristics that he would find unhelpful, or non-therapeutic, would be animals that are too hyper, overly anxious or fearful, or protective

of their owner to the point of being physically aggressive towards the client. He stated that many dogs will bite humans out of fear and there is a “mixture of fear or protectiveness.” John has only used German Shepherds in his therapy practice, and knows that based on their breed characteristics some of them are overly protective and aggressive when identifying a potential threat to self or owner. John recalled one example where a young child was in his office, and during the session got overly excited and jumped on John’s back. Although this was done in a playful and non-aggressive manner, two of his German Shepherds would have perceived that as a threat and bitten the child to protect him. The dog that he does use for therapy did not attack, and looked at his owner for direction. When told it was okay, the dog continued to lie on his bed and wait for instructions.

Metaphors/Tools for Learning in AAT

Katina talked about her first therapy dog that had cancer and other physical ailments, and how the clients could see firsthand the changes in the dog, such as shaved patches and stitches. The clients expressed concern about how she was managing her dog’s pain, and Katina used that as a “discussion about how do I manage their pain.” She expanded from the use of the dog as an example to using the dog as a tool for teaching emotions. She realized “that one of the things that could happen in a very structured setting, especially with people who have been abusive, is teaching empathy.” Teaching empathy, compassion, and other emotion based skills can be a challenging task in a counseling session. Modeling this behavioral interaction, and using the animals as an example to do so, can help a client build these skills.

Jennifer has used the horses as metaphors or tools for learning when her clients have brought up examples of how the horses interact with them similar to their personal life. One example was a woman who was trying to get the horse to move around her in a circle without touching him. Instead of moving around her, the horse “moved away from her and actually turned his butt to her, and just stood there. Her response was ‘That’s just like my husband. When I try to talk to him he turns around and he walks away on me.’” To hear her clients create their own metaphors is an amazing experience for Jennifer, albeit not unique in her practice.

Lisa used a lot of metaphors, especially when working with all the different animals while conducting the group psychotherapy sessions at the children’s inpatient hospital unit. She would use metaphors between human and animal behavior, and how that related to the children’s situation.

I had a big parrot, a borrowed big parrot, and my parakeet in one of my groups, an adolescent group. There was one of the kids in the group that was getting picked on by the other kids, and so I talked about bird behavior and in a flock of birds, if there is a bird who is different, it often is chased out of the flock. By using that metaphor it can help them look at the behavior from a different perspective.

Lisa used a lot of metaphors for her group therapy, including the concept of keeping her animals safe from physical harm, and how that relates to keeping the children physically and emotionally safe while they participate in the group session.

Susan frequently uses metaphors in her therapeutic setting with her clients. Although she is only using one horse for the session, there are a dozen horses in the pasture or nearby that create a group dynamic that is conducive to use as metaphors. Since the horses have their own herd dynamics, they are constantly interacting with each other, and giving nonverbal messages to other horses to keep the system working

smoothly. She is always looking for how the animal is interacting naturally, even if under specific structured circumstances, and she will use their reactions to help the client understand and learn about appropriate and adaptive behaviors.

So I don't want to work with a horse who will just stand there. I want him to be himself. And if that means this is scary then, he's going to move away. So that that person who maybe doesn't have that, or has you know pushed that over in their mind, can look and see that this was a healthy response. And look how quickly the horse can recover from it, and come back and be investigative and curious, but still aware of potential danger and able to protect himself.

This constant adjustment “is a wonderful metaphor for healthy families” to observe and process in relation to their own family dynamics. Not only is observing the herd dynamic a powerful metaphor, but she has also done strategic or structural modeling with the horses and the families to help them experience their dynamics.

Written Documentation

Adam has focused some of his career in trying to figure out how to bridge the gap between being a researcher and a practitioner. However, the primary goals of a researcher and a practitioner are very different. These differences have led to difficulties in proving the effectiveness of animal assisted therapy, and a “chasm” of little data to support the efficacy of the intervention.

Front line therapists really aren't trying to collect data ... people are there to treat their patients.... If the client's not coming there for research, then you owe it to the patient...to treat the problem, not to treat the research issue.

Although the practitioner's main goal is to provide quality mental health care, they still need to document their sessions to gain insight into where the patient is currently functioning. One of the ways in which Adam does this is to use scales, such as empathy scales or other measures, to document the changes in the client. He cautions that these measures are subjective in nature, and may or may not accurately reflect the

efficacy of the intervention. It will depend on how truthful the clients are being in reporting their perceptions of changes. Lastly, Adam believes that researching animal assisted interventions is different than researching other interventions, and presents unique challenges. One of the ways that we can conduct valid research is by “taking some of the anthropomorphic statements out of our commentaries.” Using the correct terminology for the animal component might help decrease the mystical, and increase accurate reporting. He elaborated by saying that professionals should stop using human labels for their actions or project emotions on the animals, but instead use scientific terms that are evidence based and clearly communicate what the animal is doing at the time.

Similarly to Adam, Katina emphasized the importance of documenting the efficacy of an animal assisted intervention. Katina uses a DAP (data, assessment, plan) progress note to document her therapy sessions. In this format, she would document any significant interactions between the dog and the client(s), and how they relate to the client’s treatment goals. “If it’s going to be an intervention, then let’s be real playful about it, and conscientious about it, and not minimize it...it’s not everything, but it absolutely is an intervention.” She thinks that one of the challenges with animal assisted therapy not getting as much respect as it should, is due to the relationship we have with animals. Until recently, animals have been used for research (as lab rats) for medical advancement. Documenting the effectiveness of the intervention will help it gain more respect in the psychology profession, and decrease the ambivalence that some people express towards it.

John also utilizes the DAP progress note for his counseling sessions, and clearly documents the use and effectiveness of animal assisted therapy. He may comment on the

way the client interacts with his dog, the dog's reactions to the client, and his (clinician's) interactions as well. For example, he might document that a "child is having trouble with regulating their emotions, or controlling their impulses, and they're obviously not attending to what the dog is trying to tell them with regard to their behavior." If he does not have the dog interacting with clients in the session, (e.g. a parent feedback session), then he will not document the dog's presence in the room, he only does do when an intervention takes place.

Susan and Jennifer practice equine facilitated therapy in their private practices, and both have been trained and certified through EAGALA. EAGALA has a unique way of documenting their interventions that is different than the other organizations in the study. Each session consists of two progress notes, one note for the client and the other for the horse. This helps the practitioners track the horse's behaviors in a more succinct manner, and is helping facilitate the gathering of data to support the efficacy of the treatment intervention.

Susan practices from the EAGALA model, but does not document the horse's behavior in the clinical note because that is not her primary focus of the session. She believes the clinical note should be for the purpose of documenting the client's process and changes in the therapy session. The most she will document about her method of intervention is a statement about using "experiential methods," because if the client ends up seeking counseling services through another organization, she does not want others to get "stuck on the horse, because this is not what this is about." She believes the horse is a "model of application" which she uses to facilitate therapy sessions that are based on her theoretical orientation.

After each session, the practitioner and horse handler sit down and discuss the events that occurred. The practitioner writes the clinical note, and the horse handler writes the horse note. The clinical note focuses on the client's perspectives, interactions, and changes, while the horse note focuses on the horse's interactions and responses to the intervention/activity. Writing a specific horse note provides the team with the ability to track the horse's behavior, and help determine if any behaviors are client or horse specific. Determining the changes in the horse's behavior can help the team decide the appropriate intervention, or course of action. The horse note will be placed in both the client and horse files. Placing a client and horse note together helps "you have the perspective of both of your facilitating team members." With the perspective of both the practitioner and equine handler, you get a "much more complete picture of what was going on that session so when you review it, you may find other things based on how the two match up."

Jennifer follows the EAGALA training and documentation guidelines in much the same way Susan does. She thinks the separate notes help the professionals keep "good track of what they do, and we can see if they're working or not working, and if we need to re-evaluate what we use or how we do things." At times, she might document the horse's behaviors in the client note, but it is only to emphasize the importance of the interaction, or the client's response to the horse. One interesting piece that Jennifer mentioned was the fact that the clients are not told the horses' names and they may choose whatever name they want the horse to have. This is to help the client be able to form their own opinion of their experiences, and not start with preconceived notions based on previous experiences or relationships.

Therapeutic Factors in AAT

Katina believes that there are a number of therapeutic factors that help an animal assisted intervention be successful, and provide an opportunity for the client to make positive changes from counseling. She thinks that the animals positively impact the surrounding environment, and “the relationship that develops is a very powerfully healing one, and one to be respected.” From the first contact with a therapeutic animal, the clients are “automatically shifting their mind set into therapy without knowing it” because the connection is with the animal in the office. So just seeing the animal can signal to a client that therapy has begun, and their defenses can be lowered more quickly. Some of the key therapeutic factors in regard to animal assisted therapy are the “opportunity for the clients to experience physical contact with a living breathing being,” a decrease in the client’s stress level, observation of the therapist being nurturing towards others, reduction of the barriers between professional and layperson, and the ability to model ways of showing emotions (empathy and nurturing) instead of just talking about them.

Jennifer identifies one of the main therapeutic factors as the ability to see the instant gratification from the client, and to know that the intervention is successful. She believes that clients assume the clinician as a good person, and that they can feel safe with the clinician because that person owns the animal(s), and they see that the clinician interacts with the animal in a positive manner.

Jennifer listed several examples of important therapeutic factors, such as the ability to see a smile on a person suffering from depression, or seeing a client that was refusing to interact with the horses start to move towards them and interact with them.

This shift in a client's behaviors is evident and observable. The ability of the horses to "take you for who you are, and they treat you as you treat them. They give unconditional love or, you know, friendship." She also believes that animals help professionals build rapport with their clients quickly and that the clients "feel more comfortable" and will start talking about their problems/concerns in a less guarded and freer manner.

Lisa discussed several therapeutic factors that are important to her in regard to helping clients progress in achieving their therapy goals. In general, she believes that her dog helps "decrease some of the anxiety, and helps them access information, feelings" that might not have been available to them otherwise. Other therapeutic factors that the animal provides are the ability of the client to feel safe and comfortable in the office. There are times when the animal will remind clients of a funny event, and humor can be an opportunity for healing to occur. If the clients own animals, it provides an opportunity for the client and professional to discuss commonalities of pet ownership, as well as share stories.

Susan discussed the importance of having an "unconditional belief that people can have their own answers and can be healthy." Two key therapeutic factors are genuineness and respect. She values these factors even more than unconditional positive regard, primarily because she believes that you cannot provide unconditional positive regard to every client due to their past history, and your values and beliefs about those events. But you can still work with them effectively. She believes the horses can provide this opportunity to experience unconditional love for the clients because "the horse doesn't hang on to that history" and pays attention to the client's actions and emotions instead. A unique therapeutic factor is the ability of the horses to interact with the herd,

and model healthy behaviors based on the situation. This is not a typical therapeutic environment, but it gives the clients the opportunity to observe and model the healthy emotional and physical behaviors of the herd. “I think out here the understanding and the cognition is coupled with action and interaction. And then that makes it much easier for the therapy to be generalized out into the person’s life.”

John identified several therapeutic factors that his dog has that are helpful in the therapy relationship. He believes his dog has the ability to show caring and concern for his client’s well-being, and that his presence helps create a sense of informality which in turn makes it easier to relate to one another. An animal’s presence may help decrease the value judgments that clients make about professionals, such as being looked upon as a “scary looking shrink, or a psychologist who is trying to get into their head and make judgments about them.” Further exploration revealed that a dog’s presence might “disarm people” and create feelings of ease and comfort that promote sharing and self-disclosure. John’s ritual of allowing his clients to give his dog treats helps facilitate trust between the client and professional. Trusting a client with your animal might translate to a different kind of trust between two humans.

Benefits for Clients and Animals

Katina understands that to bring an animal into the session there must be benefits for the clients. She believes that the animal contributes to changes in the environment and creates a home like feeling. Their presence can be a therapeutically powerful tool to help clients deal with their problems. One of the ways she identifies the success of animal assisted therapy is when the client is taking more risks in session, which allows them to be emotionally vulnerable. With this vulnerability comes the emotional and behavioral

change for the client. Once she facilitated a therapy session for a group of men who witnessed the death of a co-worker. Initially, they entered the session bewildered by the dogs' presence, and at the end of the session, after experiencing a lot of intense emotions, the men were standing around the dog to get some comfort. She also utilized her dog for an adult survivors group, and the group members benefitted because the dog provided a sense of "physical and emotional safety."

Katina acknowledged that animals should benefit from being involved in animal assisted therapy, and that the animal is there "to do a job and give it a purpose in life." Her first therapy dog benefitted from therapy sessions because "she just loved being around people and ... it just really satisfied her need for social connection," as well as allowing her to receive lots of love, attention, and petting. AAT is not beneficial if the animal appears overly stressed, in which case it should be removed from the session, or the session should be discontinued altogether.

Jennifer identified benefits similar to those mentioned by Katina regarding observing emotional, cognitive, and behavioral shifts in the client during therapy. She believes that you can utilize animals "for any person and any problem. It's just how creative you can be with exercises to address the individual's particular needs." Although clients may be hesitant to interact with horses at first due to fears, they can observe other people interacting positively with the horses, get drawn into the interactions, and start participating. The use of animals in session can "build rapport a lot quicker with clients," and one can observe the clients disclosing personal information a lot more readily without as much resistance. Jennifer has found that especially when

working with children, “they don’t see you as a threat and they just seem to open up and just start talking about anything and everything.”

Jennifer believes that since she started using horses as a therapeutic intervention, she became a better therapist, she became “more in tune with people’s body language,” and this helped her more easily identify when clients were “hiding things from themselves that they haven’t even discovered yet.” Clients can not only hide things from themselves, but from the professionals as well. If we are too quick to pass judgment that the intervention is not beneficial, then important pieces may be missed.

For instance here’s an example of a guy that had a child that wouldn’t participate, and every day for like six weeks he tried to get this child to come into the group, and the kid was like I don’t want any part of that. Well, it was a residential program, and they started noticing hoof prints outside at night and nobody was supposed to touch the horses after dark. So one night they sat up and they watched, and it was this kid who never participated in any of the groups and he was going and getting this one horse, and he was taking him out of his stall, and he was walking with him and he was talking to him, and he was telling him about all of his problems. And had they not noticed the prints and sat up that night and watched, they would have probably discharged him.

Besides creating a safer and more pleasant experience, animals help people feel more connected to the natural environment instead of feeling isolated from other living things. They also provide a safe and pleasant topic of conversation. Lisa believes that utilizing animals has a number of other benefits. Sometimes the benefits occur in subtle ways, such as a profoundly disabled child whose face lights up when he pets a guinea pig. But other times the benefits are more pronounced. One particular child who displayed a lot of anger and poor peer relations benefited from interacting and holding her rabbit. The child was able to show emotions to the rabbit that he was uncomfortable showing to other people.

This kid after group would hold the rabbit until I got done writing my notes, and so he did that after every group. And then he was going to leave the hospital, and he had tears streaming down his face when he was saying goodbye.

Like Jennifer, Susan believes that utilizing the horses in therapy can help the therapist pick up on subtle information that the client is presenting in session. You cannot pick up on these subtleties unless you have a solid theoretical foundation and understanding of how to interpret the session, and help facilitate changes for your client. Because animals are nonjudgmental, they can provide the professional with the opportunity to be more objective, and potentially less influenced by their personal biases and beliefs about the client. One of the horse handlers Susan worked with had a great example of his misguided beliefs and how he misjudged a young girl's experience in the sessions:

Even on warm days she would wear this little hooded sweatshirt with long sleeves and her hood up, and he thought you know that physically she was just kind of hiding. And she was literally kind of sitting at the side of the arena, and didn't seem to be engaging with horses that were in there with her. And at the end of about their third session and they really felt that nothing was happening the equine specialist said he made his first real classic mistake. He apologized to her for her not getting anything out of the sessions. And she was very indignant and very upset with him and she said, 'How can you say that?' And he said 'Well I just noticed you didn't do anything or interact, and you didn't connect with any of the horses.' She said, 'Yes I did.' And he said, 'Well, which one?' And she said, 'The one over there,' which was outside of their perimeter, outside the fence. It had been there every time she had been there. He said, 'What do you mean?' She said, 'She sees me.' And he said, 'What does she see?' She said, 'She sees me. She knows me and you don't.' So every time that she had been there that horse had stayed where she could see her. And to the equine specialist it was profound. The next session she revealed that what she believed what the horse knew was that she had been cutting and self-mutilating the whole time, and hiding it beneath her sweatshirt and so she revealed it only after three sessions where she really felt somebody was seeing her the whole time. So it didn't matter that that wasn't the horse that was chosen for her to work with.

Summary

Animal assisted therapy is growing in popularity among practitioners in psychology. Besides the need for basic obedience training, the participants identified a number of characteristics they felt were important for them to be effective in session. Some of the characteristics were love, tolerance, intelligence, and acceptance of clients' behaviors. Several participants use the animals as metaphors in session. They believe that the ability to see the practitioner and animal interact can help facilitate a deeper understanding of what the practitioner is trying to say, and how to start to implement that and make changes. Opinions are divided on the topic of documentation among the participants. Their views are dependent on the type of animal used, and the level of integration of the animal. For Jennifer and Susan, who use horses in therapy, they clearly document the use of the horse, and all of the horse's interactions/responses during the session; however, they keep this note separate from the client file. Adam, Katina, and John, who utilize their dogs in therapy, document in the client chart the use of the animal as an intervention, and the client's responses in the session. Because Lisa's dog is more on the periphery and has limited interaction with the clients, she does not document the dog's presence or interaction in the note.

Although the participants varied in the description of the important therapeutic factors in a relationship, they mentioned the animal's ability to put their clients at ease and create a less formal atmosphere. One mentioned the need for respect of the animal and the power they have as a healing agent. Another mentioned the ability to see the instant changes in the client, and how that helps you know if you are moving towards a positive direction. Several practitioners mentioned the need to change the way

practitioners and researchers discuss the benefits of animals assisted therapy to the public. They cautioned that we are using too many anecdotal stories, and we are not emphasizing the research based information. The anecdotal stories are touching the hearts of people, but they are not providing all the information. The practitioners told story after story about the benefits they saw from using animals in session; some were obvious while others were more subtle.

In conclusion, the cross case analysis identified five themes in which there was some overlap between the participants' beliefs about animal assisted therapy. Chapter V focuses on the conclusions and discussion of this current study, the implications of its findings, and possible topics for future research.

CHAPTER V

CONCLUSIONS AND DISCUSSION

In the previous chapter, I described the results of the within-case and cross-case analysis. The findings of this study were obtained by careful analysis of the data, which were collected by phone interviews, review of transcriptions, member and expert checks, and researcher journal. By interviewing six participants, each with unique experiences and perspectives regarding animals, I was able to gain a better understanding of how to integrate animals into a therapeutic environment, and how to document the effectiveness of this intervention. I was also able to determine areas in which future research is needed. In this chapter, I discuss the statement of the problem, provide a summary of the findings, discuss limitations of the study, and suggest implications for future research.

Statement of the Problem

Dr. Boris Levinson introduced “pet therapy” at the 1961 American Psychological Association Conference, and received mixed reviews. Since that time, professionals in the mental health/human services field have increased the utilization of animals in helping people who experience physical and mental health problems. Even though this intervention has been utilized for many years, there is minimal information on the mental health/human service professionals’ perspectives, and how they integrate the use of the animal into their therapeutic practice. Many studies have followed Dr. Levinson’s suggestions on documenting the effects of Animal Assisted Therapy (AAT; Banks &

Banks, 2002, Jessen, Cardiello, & Baun, 1996). The current research lacks the depth and understanding of a professional's journey into incorporating AAT into a therapy practice. There is also limited research on the perceived benefits and drawbacks of AAT for the client, and on the procedures for documenting the impact of the AAT intervention on the achievement of clients' goals.

Several organizations have established guidelines and procedures on how to integrate animals into therapeutic environments. These guidelines were developed to provide professionals with strategies and procedures, not only on the integration of animals into a therapeutic environment, but on ethical standards, training, and documentation. In 1992, Delta Society published *Standards of Practice in Animal Assisted Activities and Animal Assisted Therapy* (Delta Society, 2006). The book discussed the importance of using animals to help promote the well-being of humans, and outlined how to utilize the animals, the ethical issues involved, and the role of the animal and handler. In 1999, Equine Assisted Growth and Learning Association (EAGALA) began to promote human health and development through the use of horses. They provide two levels of certification to professionals who want to learn how to utilize horses in promoting human self-discovery and healing. They also have developed a mentoring program to keep professionals connected to others in order to provide support and guidance. Currently, EAGALA is conducting and soliciting research to demonstrate the effectiveness of horses in promoting humans' mental health and well-being.

With an increased acceptance of the use of animals in therapeutic environments, comes more responsibility for organizations and individuals to promote quality education, training, research, and mentoring on utilizing animals in an ethical and

effective manner. In 2007, Division 17 of the American Psychological Association established Section 13, Animal-Human Interaction: Research and Practice to educate professionals and scholars on understanding animal-human interaction in relation to counseling psychology. Currently, there is an abundance of research on animal assisted therapy, much of which has been generated by medical professionals, and through anecdotal stories. Even with an increase in the utilization of animals, and in research and awareness in the general public, there are still gaps in the current body of knowledge.

Each professional in this study had their own unique journey into the development of their area of expertise, and to what level and extent they chose to use animals in their profession. This study was designed to investigate one of the gaps on how licensed professionals in the human services/mental health field integrate and document the use of animals into a therapeutic setting. It was designed for the purpose of helping new psychologists gain a better understanding of how to successfully integrate animals into a therapeutic environment, while continuing to provide a high quality of care to their clients.

Summary of Findings

The research study was designed to explore the perspectives of licensed mental health professionals who currently utilize animals in a therapeutic setting. The questions below guided the inquiry process

The research question addressed in this study was

- Q1 What are the processes, perspectives, and beliefs about utilizing animals in a therapeutic environment from mental health/human services professionals?

The following guiding questions were used to direct the data collection process:

- Q1a What are participants' values and beliefs about animals, past and current?
- Q1b What are participants' perspectives on the benefits of animal assisted therapy?
- Q1c What are the important components of animal assisted therapy?
- Q1d What are the benefits for clients who participate in animal assisted therapy?
- Q1e What will animal assisted therapy look like in the future?

The findings in this study were obtained as a result of careful analysis of the data collected through the use of the NVIVO8 software program. By interviewing six different professionals who utilized animals in their therapeutic practice, I was able to gain a better understanding of how professionals incorporate animals into their practice, and the perceived benefits of the intervention for their clients.

Each of the six participants--Katina, Adam, Lisa, John, Jennifer, and Susan--brought a unique perspective to the interviews. They varied in their years of experience, degrees obtained, populations served, and types of animals utilized. Although their paths to becoming an animal assisted therapist varied, they all believed that animals provide therapeutic value to their clients. Several common themes emerged from the interviews: animal characteristics, use of the animal as a metaphor or learning tool, written documentation of the intervention, key therapeutic factors of AAT, and benefits of AAT for clients.

The participants believed that there are a number of important characteristics the animals should have in order to be an effective component of the therapeutic relationship. Each participant described these characteristics in a similar way. For example, they

believed that the animal should be trained and able to follow the handler's directions, but not trained to the point of losing their individual personality. Animals should have a tolerance for client behaviors such as crying, screaming, and displays of anger. Animals should be able to remove themselves from a potentially harmful situation, but not in a manner that would involve physically attacking the client (i.e., bite, scratch, and growl). Many of the participants would want their animals to be calm, easy going, loving, nurturing, unconditionally accepting of clients, and intuitive.

Previous research suggested that there are a number of important characteristics to consider when choosing an animal for therapeutic relationships. Some researchers suggested that animals should be friendly, affectionate, intelligent, energetic, playful, sociable, and have a tolerance for high levels of noise and activity from the clients (Chandler, 2005; Vanfleet, 2008). Many researchers have stressed the importance of the animal's ability to be trained, and that the handlers should be able to demonstrate that they are in control of their animals (Pichot & Coulter, 2007). Organizations such as Delta Society require that the animals be able to pass a temperament test to ensure that they are capable of handling the unique situations that may arise while they are providing AAA or AAT services to others (Delta Society, 2006).

Several of the participants have utilized their animal in sessions as a metaphor or tool for learning. Some participants have used the animal to help teach the client about their emotions, such as empathy. The participant could show empathy to the animal, and thus demonstrate to the client what that emotion was, and how to provide it to another living thing. One participant discussed physical and emotional safety with her clients through the use of her animals. Another participant utilized the dynamics of the herd to

point out metaphors and learning opportunities to her clients. The horses demonstrated similar non-verbal interactions that might parallel the clients' current struggles or situation.

Boris Levinson (1972) wrote about how animals' aid in a child's learning. He described how they can be used to help the child learn new skills, or gain a deeper understanding that learning is hard work and requires practice. Other researchers have discussed the use of animals as symbols and metaphors, and that metaphors may be able to "reflect inner images within people" (Fine, 2006, p. 186). Kopp (1995) suggested that the therapist and client can use metaphors as a way to discover what the client's concerns are, how they feel about their situation, and how they are coping with their concerns. Chandler (2005) reported that using an animal as a metaphor can expand a client's insight and growth regarding their current struggles and mental health problems. AAT has been used as a tool to help clients learn about themselves. This increase in self-awareness can facilitate positive changes in clients who are suffering from a variety of mental health problems (Niksa, 2007). Other researchers have focused on the use of animals, particularly dogs, for clients in residential and/or correctional facilities. The residents train the dogs in basic obedience skills so they can become service dogs to others. These training programs have become a successful learning tool for clients in teaching them more positive and socially acceptable behaviors, when they are interacting with others (Fournier, Geller, & Fortney, 2007; Turner, 2007; Winkle, 2008).

The participants discussed how they document the use of the animal in their clinical notes. Based on the participants' information, EAGALA trains their professionals to document their sessions on two different notes, one of which is a horse

note, and the other a client note. Both of these notes document what transpired during the session; however the horse note is written by the handler, and describes the horse's responses during the session. The client note describes the session, and that it is an experiential therapy session, but does not necessarily mention the horse or its behaviors. Other participants may document the animal intervention in a DAP (data, assessment, plan) note or in the intervention section of a clinical note.

Recently, several books have been written about animal assisted therapy, and have discussed ways to incorporate AAT into a client's written documentation. For example, in *Animal-Assisted Brief Therapy: A Solution-Focused Approach* (Pichot & Coulter, 2007), the authors discuss how to incorporate AAT into the client's treatment plan. They talk about the need to have clear and defined goals prior to utilizing a therapy dog, and to identify what the client's desired outcomes will be. VanFleet (2008) wrote a book on how to integrate play therapy and AAT, in which she provides a letter to her client's parents explaining play therapy and the use of her dog. Chandler (2005) reported the use of the SOAP progress note, which reports a client's subjective presentation, the professional's objective observations, assessment, conceptualization, and action plan. The author stated that all animal assisted interventions should be clearly documented in each SOAP progress note, including the animal's name, breed, and credentials, as well as a detailed description of the animal intervention (Chandler, 2005).

The participants in this study identified several therapeutic factors of AAT that they thought were most important. They reported that the animal provides them with the opportunity to interact with the clients in a less formal way, and that the animal acts as a social catalyst. Animals provide clients with the ability to touch and interact with another

living being, which can provide humans with comfort and support. Professionals can utilize the animal to model behaviors that they desire from their client, such as empathy, compassion, and nurturing. The participants believe that the animal may help them build rapport much quicker with their client than if the animal was not present. Animals react in a genuine and respectful manner towards the clients, depending on how the client is presenting in therapy. For example, a dog might sit closer to a client who is crying and in distress, or might back away into a corner if the client is yelling and agitated. Finally, several participants reported that their animals help the client feel more positive, and less stressed, about the counseling process.

Previous research has demonstrated findings similar to those of the participants in regard to positive therapeutic factors that an animal brings into the relationship. These include the animals acting as a social catalyst, and providing clients with an opportunity for physical contact with other living beings. Animals can also help clients disclose more personal information because they perceive the animal to be non-judgmental and accepting of them (Arkow 1987). One study discovered that AAT helped children and adolescents become more open to social interaction with others, and have a greater perception of what it means to be healthy and well-balanced (Prothmann, Bienert, & Ettrich, 2006). Researchers have found that animals can decrease a client's stress level significantly, which can lead to them being more open and engaging in a therapeutic relationship (Lefkowitz, Paharia, Prout, Debiak, Bleiberg, 2005; Serpell, 1986). A strong therapeutic relationship is essential in helping clients make positive changes. One study found that inpatient substance users perceived a positive therapeutic alliance with the staff when AAT was introduced into treatment (Wesley, Minatrea, & Watson, 2009).

The utilization of animals has also decreased clients' passivity regarding the counseling process and participation, as well as increasing clients' overall satisfaction of AAT (Martindale, 2008).

The participants in the study identified a number of benefits for the clients when AAT was part of the therapeutic relationship. Several believed that the clients appeared to be able to take greater risks in session, and were able to explore necessary areas that helped them achieve their treatment goals. Achievement of clients' treatment goals in areas such as emotion, cognition, and behavior were observed by the participants. AAT can help a client feel less isolated and more connected to other living beings and the natural environment.

The majority of the research has shown AAT to have a positive outcome on clients' emotional, cognitive, and behavioral problems/concerns. These positive outcomes can range from minor to statistically significant changes. Marx et al. (2010) found that nursing home residents with dementia were more engaged with others when an animal was present. Although the residents made positive comments about the animal, there were no statistically significant findings. In *Handbook of Animal-Assisted Therapy: Theoretical foundations and guidelines for practice* (2006) there are a number of chapters regarding the benefits of AAT with specific populations, specialized settings, and different mental health problems.

In conclusion, each of the five themes that emerged from this qualitative inquiry has been shown to be present in the current literature. Participants acknowledged core animal characteristics that they felt were necessary to help the therapeutic process. They relied on the use of the animals as a metaphor or learning tool to help their clients gain a

deeper understanding of their problems, and to find solutions. They understood the importance of documenting the use of the animal as an intervention in their clinical notes. The participants identified key therapeutic factors of an AAT relationship that have been identified in other relevant research. Finally, each participant had numerous examples and powerful stories of the benefits their clients received from participating in AAT.

Limitations of the Study

A limitation of this study is that the interviews were conducted over the phone instead of in-person. Conducting in-person interviews could have provided the readers with a detailed description of the components and benefits of animals assisted therapy. A detailed description could have been written about the therapeutic environment; such as the ambiance of the environment, professionals mannerisms and interactions with others, and the animal(s) interactions with the handler and interviewer. Additionally, the lack of the client's perspectives regarding the benefits or limitations of animal assisted therapy is a limitation of this study. Interviewing the client's regarding their perspectives on the benefits and limitations of animal assisted therapy could provide the reader with a rich description and in-depth understanding of these benefits of utilizing animals to help clients achieve treatment goals and moving towards healing. Both of these additions would have provided the readers with a thick description and more examples of the beneficial components of AAT.

A final limitation is the inability of future researchers to replicate the study. This is due to the fact that it was a semi-structured, in-depth interview; therefore, follow up questions were dependent on answers the participants provided during the interview process. Each participant answered the questions based on their thoughts, perspectives,

and beliefs at that moment in time. Since their perspectives are always changing as they experience new things, a researcher trying to replicate the study could not reproduce the moment in time when this study was conducted, analyzed, and interpreted.

Implications and Future Research

Due to the exploratory nature of the current study, further research is needed to continue to gain a deeper understanding of how professionals utilize animals in a therapeutic relationship. This should include how professionals document the effectiveness of the intervention, and with which populations, or mental health issues, the intervention appears to be effective. Although there are hundreds of articles, and dozens of books, written about the benefits of the human-animal bond and the effectiveness of AAT, much of the research is based on anecdotal stories, or studies conducted in a tightly controlled setting (hospital or nursing home). The research is still lacking on how mental health/human services professionals integrate animals into their private practice, and how animals are used in community outpatient settings. Furthermore, the research has not yet investigated in detail the perspectives of these professionals. This study was an initial attempt to do so.

The results of this study suggest several things. First, professionals in the mental health/human services field need to utilize a certification program which trains professionals on how to integrate animals into a therapeutic setting. This training program would include requirements beyond the obedience and temperament test that organizations currently offer professionals. Delta society offers trainings on becoming a Pet Partner; however, only 24 of the 50 states have trainings available. In Florida only one training was available during a 30 day period. There needs to be more availability of

training courses and certifications for professionals interested in starting their own AAT practice. Without access to knowledgeable instructors, professionals will continue to venture out on their own, and may not get the appropriate training needed to implement the intervention accurately and effectively. Inappropriate or ineffective training could impact the therapeutic relationship and decrease the effectiveness the animal may have in helping the client's achieve their goals. This decrease in effectiveness may impact the way that clients and the community view animal assisted therapy, and portray a more negative view of the intervention.

Second, the six participants that I interviewed varied in the ways they documented the effectiveness of the intervention. EAGALA has developed a clinical note on the effectiveness of the intervention that is standardized, purposeful, and suitable for submission to the organization. Other organizations, such as Delta Society, or APA, Division 17, Section 13, need to develop a standardized clinical note similar to EAGALA's, and start to collect data on the effectiveness of AAT interventions with other animals. If organizations are soliciting clinical notes, or documentation, to support the effectiveness of AAT when treating a specific mental health problem, they may be able to collect a significant amount of data to demonstrate specific components of its effectiveness. Part of determining the effectiveness of the AAT intervention would be to utilize standardized assessments that measure a specific problem (e.g., the BECK Depression Inventory, the Child Behavior Checklist) at the initial session and the termination session. Utilizing standardized assessment will help increase the validity and reliability of the AAT intervention. There are a number of variables that can be measured regarding AAT and its effectiveness in working with clients of all ages, therapeutic

settings, and mental health concerns. Future studies could also focus on the impact of having an animal present and how it may change the mental health professionals' perspectives and interventions when working with clients. Exploration of all of these different variables is an important next step in moving AAT into a valid therapeutic intervention.

Third, professional organizations such as American Psychological Association, and the American Counseling Association, need to develop and offer trainings regarding AAT to professionals which meet the requirements for continuing education credits based on state licensures. Currently, there are multiple non-for-profit organizations that offer training for animal assisted activity and volunteer work. There is not one main organization which is affiliated with a psychology organization that offers training to professionals strictly for AAT purposes. Although Section 13 was recently started to promote the dissemination of information to professionals regarding different topics of interest, they do not focus on the actual training of the animals themselves. These trainings should offer professionals an opportunity to understand the benefits of AAT, the implementation of AAT in a variety of settings, with different populations, and for different mental health problems. The trainings should enhance a professional's knowledge and expertise so they can implement these skills into their therapeutic environments. For professionals who utilize animals on a regular basis in their therapeutic practice, it is important that they receive training and education on the most effective and beneficial AAT interventions. Another component of the professional training is to offer a yearly conference dedicated to AAT and promoting continuing

education, training, therapeutic interventions, appropriate documentation, and ability to participate in research projects regarding effectiveness of the intervention.

Fourth, future research in AAT needs to move away from anecdotal stories toward identifying and utilizing a more evidenced based approach. Using an evidenced based approach to AAT will help increase the credibility of the intervention in the field of psychology. It will also help to identify key components of the intervention to others on why the intervention is as effective as it is. Although many books and articles have been written about the human animal bond, there is still a large component of the relationship that has yet to be defined. If professionals can continue to pinpoint the pieces of the relationship that are effective in treating mental health problems, the intervention can move towards being a respected and valued practice, and away from being just a “feel good” experience. One way that researchers and professionals can attempt to define what components of animal assisted therapy appear to be effective is to solicit information from the clients who receive these services. This can be accomplished through client surveys that ask specific questions which target areas of AAT that researchers might be trying to identify as key components of its success.

Part of identifying the key components of the intervention as stated above would be to identify the different levels of the AAT intervention. As evidenced by the participants in the study, each one of them utilized the animal(s) to varying degrees. One participant utilized her animal to provide a warm and inviting environment but did not use her dog as a specific and planned intervention or address a treatment goal. The other participants utilized their animals to varying degrees; some of them used the animal for some of their interventions, while others used their animals for almost all or every

intervention. The purpose, rationale, and decision making of when and how professionals utilize their animals is an important component to explore further.

Exploring the professionals decision making on the integration of their animal could help other professionals gain a better understanding of how to integrate their animals and for what purpose or intervention to do so.

Fifth, there are a number of different names for AAT that professionals use interchangeably, such as animal assisted psychotherapy, pet therapy, pet facilitated therapy, equine facilitated psychotherapy, equine therapy, and dolphin assisted therapy. Although there are many different names that can be used to describe AAT, it is not a therapy in itself; therefore, professionals should use the term “animal intervention” or “animal assisted intervention.” Several of the participants in this study stated they utilize the animals as an adjunct in their therapy, and that the animal is not the only intervention or strategy that they use with the clients. They do not believe that AAT is an entity on its own, but rather interventions that can enhance the therapeutic relationship and help the client achieve their goals.

Sixth, organizations which offer mental human/human service professionals’ liability insurance need to provide insurance for AAT interventions. Currently, organizations such as Delta Society and Therapy Dogs International may offer professionals liability insurance; however, organizations such as American Psychological Association or American Counseling Association do not. Since, AAT is an intervention that requires the use of another living being (e.g., dog, horse, cat) it is important that professionals are able to purchase a comprehensive insurance coverage that will meet the needs of their practice. This coverage can provide the mental health professional with the

knowledge and security that if anything negative were to occur (e.g., client being bit, kicked) that they could be covered for monetary damages and well as receive legal representation. Since, AAT is dealing with a live animal, it would be important to have this be a separate section in their liability insurance to ensure that it is covered and the coverage is explained in full detail.

Summary

AAT is becoming a more widely used intervention among professionals in the mental health/human services professions. Much of the research has focused on anecdotal stories, or on the use of animals in specific populations, facilities, or mental health problems. No studies have focused on gaining a deeper understanding of the professionals' perspectives of AAT. This would include how they incorporate animals into their therapeutic environment, how they document the intervention, their perceived benefits of AAT for the clients, and the important components of AAT. In 2007, The American Psychological Association initiated research in the above mentioned areas when they established Section 13, Animal-Human Interactions: Research and Practice. APA is conducting research and disseminating information to psychologists who are currently utilizing or aspire to use animals in their therapeutic practice.

This in-depth qualitative study investigated six professionals' perspectives and beliefs regarding AAT and how they think AAT benefits their clients. Five main themes emerged from the interviews: important animal characteristics, the use of the animal as a metaphor or tool for learning, documentation on the use of the animal in clinical notes, the key therapeutic factors of AAT that promote clients' growth and change, and examples of clients' benefits when AAT has been used as an intervention.

Several limitations may prevent this study from being generalizable to others. These include the small sample size, and the inability to provide a thicker description because of the interviews being conducted only by phone. Also, the interviews were set up to be in a semi-structured format to give the researcher the ability to ask follow up questions based on the answers provided by the participants. No two participants will answer the questions in the same manner, because each one is unique, and brings with them their own personal stories, beliefs, and values about their world.

Animal assisted interventions have been gaining in popularity, and are becoming more widely known and accepted among professionals and lay persons. Future research is needed to increase the reliability and validity of the intervention, and incorporating a more evidenced based approach may help achieve this goal. Also, organizations need to educate and train professionals who utilize animals in therapy. A certification program, combined with ongoing continuing education opportunities, will enhance professionals' knowledge and expertise, and promote the appropriate use of the animals in the therapeutic relationship. With over 150 million dogs, cats, and horses available to use as a therapeutic intervention, organizations and professionals need to continue to strive toward providing the most effective animal assisted intervention possible.

REFERENCES

- Adams, D. L. (1997). Animal-assisted enhancement of speech therapy: A case study. *Anthrozoos, 10*(1), 53-56.
- Allen, J. M., Kellegrew, D. H., & Jaffe, D. (2000). The experience of pet ownership as a meaningful occupation. *Canadian Journal of Occupational Therapy, 67*(4), 271-278.
- Allen, K. M., Blascovich, J., Tomaka, J., & Kelsey, R. M. (1991). Presence of human friends and pet dogs as moderators of autonomic responses to stress in women. *Journal of Personality and Social Psychology, 61*(4), 582-589.
- American Psychological Association. (2001). *Publication manual of the American Psychological Association* (5th Ed.). Washington, DC: American Psychological Association.
- American Psychological Association. (2007). *Animal-human interaction: Research & practice*. Retrieved from <http://www.apa-ahi.org>
- Arkow, P. (Ed.). (1987). *The loving bond: Companion animals in the helping professions*. Saratoga, CA: R & E Publishers, Inc.
- Banks, M. R., & Banks, W. A. (2002). The effects of animal-assisted therapy on loneliness in an elderly population in long-term care facilities. *Journal of Gerontology, 57A*(7), 428-432.

- Banks, M. R., Willoughby, L. M., & Banks, W. A. (2008, March). Animal-assisted therapy and loneliness in nursing homes: use of robotic versus living dogs. *Journal of American Medical Directors Association, 173-177.*
- Banziger, G., & Roush, S. (1983). Nursing homes for the birds: A control-relevant intervention with bird feeders. *The Gerontologist, 23(5), 527-531.*
- Barak, Y., Savorai, O., Mavashev, S., & Beni, A. (2001). Animal-assisted therapy for elderly schizophrenic patients: A one-year controlled trial. *American Journal of Geriatric Psychiatry, 9(4), 439-442.*
- Bardill, N., & Hutchinson, S. (1997). Animal-assisted therapy with hospitalized adolescents. *Journal of Child and Adolescent Psychiatric Nursing, 10(1), 17-25.*
- Barker, S. B., & Dawson, K. S. (1998). The effects of animal-assisted therapy on anxiety ratings of hospitalized psychiatric patients. *Psychiatric Services, 49, 797-801.*
- Barker, S. B., Pandurangi, A. K., & Best, A. M. (2003). Effects of animal-assisted Therapy on patients' anxiety, fear, and depression before ECT. *The Journal of Electroconvulsive Therapy, 19(1), 38-44.*
- Barker, S. B., Rasmussen, K. G., & Best, A. M. (2003). Effect of aquariums on electroconvulsive therapy patients. *Anthrozoos, 16(3), 229-240.*
- Beck, A., & Katcher, A. (1996). *Between pets and people: The importance of animal companionship* (Rev. Ed). West Lafayette, IN: University Press.
- Beck, A. M., Seraydarian, L., & Hunter, G. F. (1986). Use of animals in the rehabilitation of psychiatric inpatients. *Psychological Reports, 58, 63-66.*

- Benda, W., McGibbon, N. H., & Grant, K. L. (2003). Improvements in muscle symmetry in children with cerebral palsy after equine-assisted therapy (Hippotherapy). *The Journal of Alternative and Complementary Medicine*, 9(6), 817-825.
- Berget, B., Ekeberg, O., & Braastad, B. O. (2008). Animal-assisted therapy with farm animals for person with psychiatric disorders: Effects on self-efficacy, coping ability and quality of life, a randomized controlled trial. *Clinical Practice and Epidemiology in Mental Health*, 4(9), 1-7.
- Berget, B., Skarsaune, I., Ekeberg, O., & Braastad, B. O. (2007). Humans with mental disorders working with farm animals: A behavioral study. *Occupational Therapy in Mental Health*, 23(2), 101-117.
- Bernstein, P. L., Friedmann, E., & Malaspina, A. (2000). Animal-assisted therapy enhances resident social interaction and initiation in long-term care facilities. *Anthrozoos*, 13(4), 213-224.
- Bizub, A. L., Joy, A., & Davidson, L. (2003). "It's like being in another world": Demonstrating the benefits of therapeutic horseback riding for individuals with psychiatric disability. *Psychiatric Rehabilitation Journal*, 26(4), 377-384.
- Braun, C., Stangler, T., Narveson, J., & Pettingell, S. (2009). Animal-assisted therapy as a pain relief intervention for children. *Complementary Therapies in Clinical Practice*, 15, 105-109.
- Breising, K., & Linke, K. (2003). Behavior of dolphins towards adults and children during swim-with-dolphin programs and towards children with disabilities during therapy sessions. *Anthrozoos*, 16(4), 315-331.

- Burton, H. (2003). Case studies of adults receiving horse-riding therapy. *Anthrozoos*, 16(3), 263-276.
- Chandler, C. (2005). *Animal assisted therapy in counseling*. New York: Routledge.
- Chinner, T. L., & Dalziel, F. R. (1991). An explorative study on the viability and efficacy of a pet-facilitated therapy project within a hospice. *Journal of Palliative Care*, 7, 13-20.
- Christian, J. E. (2005). All creatures great and small: Utilizing equine-assisted therapy to treat eating disorders. *Journal of Psychology and Christianity*, 24(1), 65-67.
- Cole, K. M., Gawlinski, A., Steers, N., & Kotlerman, J. (2007). Animal-assisted therapy in patients hospitalized with heart failure. *American Journal of Critical Care*, 16(6), 575-585.
- Connor, K., & Miller, J. (2000). Help from our animal friends. *Nursing Management*, 31(7), 42-46.
- Corsini, R. J., & Wedding, D. (2000). *Current psychotherapies* (6th Ed.). Itasca, IL: F. E. Peacock Publishers.
- Corson, S. A., Corson, E. O., Gwynne, P. H., & Arnold, L. E. (1975). Pet-facilitated psychotherapy in a hospital setting. *Current Psychiatric Therapy*, 15, 277-286.
- Creswell, J. W. (1998). *Qualitative inquiry and research design: Choosing among five traditions*. Thousand Oaks, CA: Sage Publications.
- Crotty, M. (1998). *The foundations of social research: Meaning and perspective in the research process*. Thousand Oaks, CA: Sage Publications.

- Curtright, A., & Turner, G. S. (2002). The influence of a stuffed and live animal on communication in a female with Alzheimer's dementia. *Journal of Medical Speech-Language Pathology, 10*(1), 61-72.
- Cusack, O. (1988). *Pets and mental health*. New York: The Haworth Press.
- Cusack, O., & Smith, E. (1984). *Pets and the elderly: The therapeutic bond*. New York: The Haworth Press.
- Delta Society. (2006). *Petition to establish*. Retrieved from <http://www.deltasociety.org>
- Denzin, N. K. (1989). *Interpretive interactionism*. Newbury Park, CA: Sage Publications.
- Denzin, N. K., & Lincoln, Y. S. (2005). *The Sage handbook of qualitative research* (3rd Ed.). Thousand Oaks, CA: Sage Publications.
- DeSchraver, M. M., & Riddick, C. C. (1990). Effects of watching aquariums on elders' stress. *Anthrozoos, 4*(1), 44-48.
- Donmoyer, R. (2000). *Generalizability and the single-case study*. In R. Gomm, M. Hammersley, & P. Foster (Eds.), *Case study methods* (pp. 45-68). Thousand Oaks, CA: Sage Publications.
- Edwards, N. E., & Beck, A. M. (2002). Animal-assisted therapy and the nutrition in Alzheimer's disease. *Western Journal of Nursing Research, 24*(6), 697-712.
- Ewing, C. A., MacDonald, P. M., Taylor, M., & Bowers, M. J. (2007). Equine-facilitated learning for youths with severe emotional disorders: A quantitative and qualitative study. *Child Youth Care Forum, 36*, 59-72.
- Equine Assisted Growth and Learning Association. (1999). *General information*. Retrieved from <http://www.eagala.org>

- Falk, H., & Wijk, H. (2008). Natural activity: An explorative study of the interplay between cage-birds and older people in a Swedish hospital setting. *International Journal of Older People Nursing, 3*, 22-28.
- Fick, K. M. (1993). The influence of an animal on social interactions of nursing home residents in a group setting. *American Journal of Occupational Therapy, 47*(6), 529-534.
- Fine, A. (Ed.). (2000). *Handbook on animal-assisted therapy: Theoretical foundations and guidelines for practice*. San Diego, CA: Academic Press.
- Fine, A. (Ed.). (2006). *Handbook on animal-assisted therapy: Theoretical foundations and guidelines for practice* (2nd Ed.). San Diego, CA: Academic Press.
- Folse, E. B., Minder, C. C., Aycock, M. J., & Santana, R. T. (1994). Animal-assisted therapy and depression in adult college students. *Anthrozoos, 7*(3), 188-194.
- Fournier, A. K., Geller, E. S., & Fortney, E. V. (2007). Human-animal interaction in a prison setting: Impact on criminal behavior, treatment progress, and social skills. *Behavior and Social Issues, 16*, 89-105.
- Friedmann, E., Katcher, A. H., Lynch, J., & Thomas, S. (1980). Animal companions and one-year survival of patients discharged from a coronary care unit. *Public Health Reports, 95*, 307-312.
- Friesen, L. (2010). Exploring animal-assisted programs with children in school and therapeutic contexts. *Journal of Early Childhood Education, 37*, 261-267.
- Greer, K. L., Pustay, K. A., Zaun, T. C., & Coppens, P. (2001). A comparison of the effects of toys versus live animals on the communication of patients with dementia of the Alzheimer's type. *Clinical Gerontologist, 24*(3/4), 157-173.

- Gubrium, J. F., & Holstein, J. A. (Eds.). (2002). *Handbook of interviewing research*. Thousand Oaks, CA: Sage Publications.
- Gullone, E. (2003). The proposed benefits of incorporating non-human animals into preventative efforts for conduct disorder. *Anthrozoos, 16*(2), 160-174.
- Hanselman, J. L. (2001). Coping skills interventions with adolescents in anger management using animals in therapy. *Journal of Child and Adolescent Group Therapy, 11*(4), 159-195.
- Hansen, K. M., Messinger, C. J., Baun, M. M., & Megel, M. (1999). Companion animals alleviating distress in children. *Anthrozoos, 12*(3), 142-148.
- Heimlich, K. (2001). Animal-assisted therapy and the severely disabled child: A quantitative study. *The Journal of Rehabilitation, 67*(4), 48-55.
- Hoelscher, K., & Garfat, T. (1993). Talking to the animal. *Journal of Child and Youth Care, 8*(3), 87-92.
- Holcomb, R., Jendro, C., Weber, B., & Nahan, U. (1997). Use of an aviary to relieve depression in elderly males. *Anthrozoos, 10*(1), 32-36.
- Holcomb, R. & Meacham, M. (1989). Effectiveness of an animal-assisted therapy program in an inpatient psychiatric unit. *Anthrozoos, 2*(4), 259-264.
- Intermountain Therapy Animals. (2000). *R.E.A.D. program*. Retrieved from <http://www.therapyanimals.org>
- Jalongo, M. R. (2005). "What are all these dogs doing at school?" Using therapy dogs to promote children's reading practice. *Childhood Education, 81*(3), 152-158.

- Jalongo, M. R., & Astorino, T., & Bomboy, N. (2004). Canine visitors: The influence of therapy dogs on young children's learning and well-being in classrooms and hospitals. *Early Childhood Education Journal*, 32(1), 9-16.
- Jessen, J., Cardiello, F., & Baun, M. M. (1996). Avian companionship in alleviation of depression, loneliness, and low morale of older adults in skilled rehabilitation units. *Psychological Reports*, 78, 339-348.
- Johnson, R. A., & Meadows, R. L. (2002). Older Latinos, pets, and health. *Western Journal of Nursing Research*, 24(6), 609-620.
- Johnson, R. A., Meadows, R. L., Haubner, J. S., & Sevedge, K. (2003). Human-animal interaction: A complementary/alternative medical (CAM) intervention for cancer patients. *American Behavioral Scientist*, 47(1), 55-69.
- Kaiser, L., Spence, L. J., Lavergne, A. G., & Bosch, K. L. (2004). Can a week of therapeutic riding make a difference?-A pilot study. *Anthrozoos*, 17(1), 63-72.
- Kaminski, M., Pellino, T., & Wish, J. (2002). Play and pets: The physical and emotional impact of child-life and pet therapy on hospitalized children. *Children's Healthcare*, 31(4), 321-335.
- Kanamori, M., Suzuki, M., Yamamoto, K., Kanda, M., Matusui, Y., Kojima, E., Fukawa, H., Sugita, T., & Oshiro, H. (2001). A day care program and evaluation of animal-assisted therapy (AAT) for the elderly with senile dementia. *American Journal of Alzheimer's Disease and Other Dementias*, 16(4), 234-239.
- Katcher, A. H., & Beck, A. M. (1983). *New perspectives on our lives with companion animals*. Philadelphia, PA: University of Pennsylvania Press.

- Katsinas, R. P. (2000). The use and implications of a canine companion in a therapeutic day program for nursing home residents with dementia. *Activities, Adaptation & Aging, 25*(1), 13-29.
- Kawamura, N., Niiyama, M., & Niiyama, H. (2007). Long-term evaluation of animal-assisted therapy for institutionalized elderly people: A preliminary result. *Psychogeriatrics, 7*, 8-13.
- Klontz, B. T., Bivens, A., Leinart, D., & Klontz, T. (2007). The effectiveness of equine-assisted experiential therapy: Results of an open clinical trial. *Society and Animals, 15*, 257-267.
- Kogan, L. R., Granger, B. P., Fitchett, J. A., Helmer, K. A., & Young, K. J. (1999). The human-animal team approach for children with emotional disorders: Two case studies. *Child & Youth Care Forum, 28*(2), 105-121.
- Kongable, L. G., Buckwalter, K. C., & Stolley, J. M. (1989). The effect of pet therapy on the social behavior of institutionalized Alzheimer's clients. *Archives of Psychiatric Nursing, 3*(4), 191-198.
- Kopp, R. R. (1995). *Metaphor therapy*. New York: Brunner/Mazel.
- Kovacs, Z., Bulucz, J., Kis, R., & Simon, L. (2006). An exploratory study of the effect of animal-assisted therapy on nonverbal communication in three schizophrenic patients. *Anthrozoos, 19*(4), 353-364.
- Kovacs, Z., Kis, R., Rozsa, S., & Rozsa, L. (2004). Animal-assisted therapy for middle-aged schizophrenic patients living in a social institution. A pilot study. *Clinical Rehabilitation, 18*, 483-486.

- Kramer, S. C., Friedmann, E., & Bernstein, P. L. (2009). Comparison of the effect of human interaction, animal-assisted therapy, and AIBO-assisted therapy on long-term care residents with dementia. *Anthrozoos*, 22(10), 43-57.
- Kvale, S. (1996). *Interviews: An introduction to qualitative research interviewing*. Thousand Oaks, CA: Sage Publications.
- LaFrance, C., Garcia, L. J., & Labreche, J. (2007). The effect of a therapy dog on the communication skills of an adult with aphasia. *Journal of Communication Disorder*, 40, 215-224.
- Lange, A. M., Cox, J. A., Bernert, D. J., & Jenkins, C. D. (2006/2007). Is counseling going to the dogs? An exploratory study related to the inclusion of an animal in group counseling with adolescents. *Journal of Creativity in mental Health*, 2(20), 17-31.
- Laun, L. (2003). Benefits of pet therapy in dementia. *Home HealthCare Nurse*, 21(1), 49-52.
- Lefkowitz, C., Paharia, I., Prout, M., Debiak, D., & Bleiberg, J. (2005). Animal-assisted prolonged exposure: A treatment for survivors of sexual assault suffering posttraumatic stress disorder. *Society & Animals*, 13(4), 275-295.
- Le Roux, M. C., & Kemp, R. (2009). Effect of a companion dog on depression and anxiety levels of elderly residents in a long-term care facility. *Psychogeriatrics*, 9, 23-26.
- Levinson, B. (1962). The dog as a "co-therapist." *Mental Hygiene*, 46, 59-65.
- Levinson, B. M. (1967). The pet and the child's bereavement. *Mental Hygiene*, 51(2), 197-200.

- Levinson, B. M. (1971). Household pets in training schools serving delinquent children. *Psychological Reports, 28*(2), 475-481.
- Levinson, B. M. (1972). *Pets and human development*. Springfield, IL: Charles C. Thomas Publishers, LTD.
- Levinson, B. M. (1978). Pets and personality development. *Psychological Reports, 42*(3, Pt 2), 1031-1038.
- Levinson, B. M. (1997). *Pet-oriented child psychotherapy*. Springfield, IL: Charles C. Thomas Publishers, LTD.
- Libin, A., & Cohen-Mansfield, J. (2004). Therapeutic robotcat for nursing home residents with dementia: Preliminary inquiry. *American Journal of Alzheimer's Disease and Other Dementias, 19*(2), 111-116.
- Limond, J. A., Bradshaw, J. W. S., & Cormack, K. F. (1997). Behavior of children with learning disabilities interacting with a therapy dog. *Anthrozoos, 10*(2/3), 84-89.
- Lincoln, Y., & Guba, E. (1985). *Naturalistic inquiry*. Beverly Hills, CA: Sage Publications.
- Liptak, G. S. (2005). Complementary and alternative therapies for cerebral palsy. *Mental Retardation and Developmental Disabilities Research Review, 11*(2), 156-163.
- Lloyd, J. (1997). Hard work on a ranch for young offenders. *Christian Science Monitor, 88*(170), 10.
- Lukina, L. N. (1999). Influence of dolphin-assisted therapy sessions on the functional state of children with psychoneurological symptoms of diseases. *Human Physiology, 25*(6), 676-679.

- Lust, E., Ryan-Haddad, A., Coover, K., & Snell, J. (2007). Measuring clinical outcomes of animal-assisted therapy: Impact on resident medication usage. *The Consultant Pharmacist, 22*(7), 580-585.
- Lutwack-Bloom, P., Wijewickrama, R., & Smith, B. (2005). Effects of pets versus people visits with nursing home residents. *Journal of Gerontological Social Work, 44*(3/4), 137-159.
- Macauley, B. L. (2006). Animal-assisted therapy for persons with aphasia: A pilot study. *Journal of Rehabilitation Research & Development, 43*(3), 357-366.
- Mahoney, M. J. (2003). *Constructive psychotherapy: A practical guide*. New York, NY: The Guildford Press.
- Mallon, G. P. (1994). Cow as co-therapist: Utilization of farm animals as therapeutic aides with children in residential treatment. *Child and Adolescent Social Work Journal, 11*(6), 455-474.
- Marino, L., & Lilienfeld, S. O. (1998). Dolphin-assisted therapy: Flawed data, flawed conclusions. *Anthrozoos, 11*(4), 194-200.
- Marr, C. A., French, L., Thompson, D., Drum, L., Greening, G., Mormon, J., Henderson, I., & Hughes, C. W. (2000). Animal-assisted therapy in psychiatric rehabilitation. *Anthrozoos, 13*(1), 43-47.
- Marshall, C., & Rossman, G. B. (1999). *Designing qualitative research* (3rd Ed.). Thousand Oaks, CA: Sage Publications.
- Martin, F., & Farnum, J. (2002). Animal-assisted therapy for children with pervasive developmental disorders. *Western Journal of Nursing Research, 24*(6), 657-670.

- Martindale, B. P. (2008). Effect of animal-assisted therapy on engagement of rural nursing home residents. *American Journal of Recreation Therapy*, 7(4), 45-53.
- Marx, M. S., Cohen-Mansfield, J., Regier, N. G., Dakheel-Ali, M., Srihari, A., & Thein, K. (2010). The impact of different dog-related stimuli on engagement of persons with dementia. *American Journal of Alzheimer's Disease & Other Dementias*, 25(1), 37-45.
- McCabe, B. W., Baun, M. M., Speich, D., & Agrawal, S. (2002). Resident dog in the Alzheimer's special care unit. *Western Journal of Nursing Research*, 24(6), 684-696.
- Melson, G. F. (2003). Child development and the human-companion animal bond. *American Behavioral Scientist*, 47(1), 31-39.
- Merriam, S. B. (1998). *Qualitative research and case study applications in education*. San Francisco, CA: Jossey-Bass Publishers.
- Merriam, S. B. (2009). *Qualitative research: A guide to design and implementation*. San Francisco, CA: Jossey-Bass Publishers.
- Moody, W. J., King, R., & O'Rourke, S. (2002). Attitudes of pediatric medical ward staff to a dog visitation programme. *Journal of Clinical Nursing*, 11, 537-544.
- Morrow, S. L. (2007). Qualitative research in counseling psychology: Conceptual foundations. *The Counseling Psychologist*, 35(2), 209-235.
- Motomura, N., Yagi, T., & Ohyama, H. (2004). AAT for people with dementia. *Psychogeriatrics*, 4, 40-42.
- Muschel, I. J. (1984). Pet therapy with terminal cancer patients. *The Journal of Contemporary Social Work*, 451-458.

- Nagengast, S. L., Baun, M. N., Megel, M., & Leibowitz, J. M. (1997). The effects of the presence of a companion animal on physiological arousal and behavioral distress in children during a physical examination. *Journal of Pediatric Nursing, 12*(6), 323-330.
- Nathans-Barel, I., Feldman, P., Berger, B., Modal, I., & Silver, H. (2005). Animal-assisted therapy ameliorates anhedonia in schizophrenia patients. *Psychotherapy and Psychosomatics, 74*, 31-35.
- Nathanson, D. E. (1998). Long-term effectiveness of dolphin-assisted therapy for children with severe disabilities. *Anthrozoos, 11*(1), 22-32.
- Nathanson, D. E., de Castro, D., Friend, H., & McMahon, M. (1997). Effectiveness of short-term dolphin-assisted therapy for children with severe disabilities. *Anthrozoos, 10*, 90-100.
- Nathanson, D. E., & de Faria, S. (1993). Cognitive improvements of children in water with and without dolphins. *Anthrozoos, 6*(1), 17-27.
- Nielsen, J. A., & Delude, L. A. (1994). Pets as adjunct therapists in a residence for former psychiatric patients. *Anthrozoos, 7*(3), 166-171.
- Niksa, E. (2007). The use of animal-assisted therapy in psychiatric nursing. *Journal of Psychosocial Nursing, 45*(6), 56-58.
- Patton, M. Q. (1987). *How to use qualitative methods in evaluation*. Newbury Park, CA: Sage Publications.
- Perelle, I. B., & Granville, D. A. (1993). Assessment of the effectiveness of a pet facilitated therapy program in a nursing home setting. *Society and Animals, 1*(1), 91-100.

- Petition to establish a section on human-animal studies in Division 17, Society of Counseling Psychology. (2006, Fall). *American Psychological Association, Society of Counseling Psychology Newsletter*, 20.
- Peterson, L. (1999). How puppy love is therapeutic: The miracle of Murphy. *Biography Magazine*, 44-47, 110-111.
- Phelps, K. A., Miltenberger, R. G., Jens, T., & Wadeson, H. (2008). An investigation of the effects of dog visits on depression, mood, and social interaction in elderly individuals living in a nursing home. *Behavioral Interventions*, 23, 181-200.
- Pichot, T., & Coulter, M. (2007). *Animal-assisted brief therapy: A solution-focused approach*. New York, NY: Routledge.
- Prothmann, A., Bienert, M., & Ettrich, C. (2006). Dogs in child psychotherapy: Effects on state of mind. *Anthrozoos*, 19(3), 265-277.
- Redefer, L. A., & Goodman, J. F. (1989). Brief report: Pet-facilitated therapy with autistic children. *Journal of Autism and Developmental Disorders*, 19, 461-467.
- Reichert, E. (1994). Play and animal assisted therapy: A group treatment model for sexually abused girls ages 9-13. *Family Therapy*, 21, 55-62.
- Reichert, E. (1998). Individual counseling for sexually abused children: A role for animals and storytelling. *Child and Adolescent Social Work Journal*, 15(3), 177-185.
- Richeson, N. E. (2003). Effects of animal-assisted therapy on agitated behaviors and social interactions of older adults with dementia. *American Journal of Alzheimer's Disease and Other Dementias*, 18(6), 353-358.

- Roberto, M. (2002). Animal-assisted therapy: A modality of treatment for the patient with spinal cord injury. *SCINursing, 19*(3), 142-143.
- Roberts, F., Bradberry, J., & Williams, C. (2004). Equine-facilitated psychotherapy benefits students and children. *Holistic Nursing Practice, 32-35*.
- Roosevelt, M. (2001, August, 6). Canine candy stripers. *Time, 158*(5), 52-54.
- Rubin, H. J., & Rubin, I. S. (1995). *Qualitative interviewing*. Thousand Oaks, CA: Sage Publications.
- Schwandt, T. A. (2001). *Dictionary of qualitative inquiry* (2nd Ed.). Thousand Oaks, CA: Sage Publications.
- Schwartz, A., & Patronek, G. (2002). Methodological issues in studying the anxiety-reducing effects of animals: Reflections from a pediatric dental study. *Anthrozoos, 15*(4), 290-298.
- Schweitzer, A., Buxbaum, M., & Rosen, M. (2000). Animal-assisted therapy. In K. L. Fontaine (Ed.), *Complementary and alternative therapies for nursing practice* (2nd Ed.; pp. 443-462). New Jersey: Pearson Prentice Hall.
- Sellers, D. M. (2005). The evaluation of an animal assisted therapy intervention for elders with dementia in long-term care. *Activities, Adaptation, & Aging, 30*(1), 61-77.
- Serpell, J. A. (1986). *In the company of animals: A study of human-animal relationships*. New York, NY: Basil Blackwell, INC.
- Servais, V. (1999). Come comments on context embodiment in zootherapy: The case of the autidolphin project. *Anthrozoos, 12*(1), 5-15.
- Sharkin, B. S., & Knox, D. (2003). Pet loss: Issues and implications for the psychologist. *Professional Psychology: Research and Practice, 34*(4), 414-421.

- Siegel, J. M., Angulo, F. J., Detels, R., Wesch, J., & Mullen, A. (1999). AIDS diagnosis and depression in the multicenter AIDS cohort study: The ameliorating impact of pet ownership. *AIDS Care, 11*(2), 157-170.
- Sockalingam, S., Li, M., Krishnadev, U., Hanson, K., Balaban, K., Pacione, L. R., & Bhalerao, S. (2008). Use of animal-assisted therapy in the rehabilitation of an assault victim with a concurrent mood disorder. *Issues in Mental Health Nursing, 29*, 73-84.
- Spence, L. J., & Kaiser, L. (2002). Companion animals and adaptation in chronically ill children. *Western Journal of Nursing Research, 24*(6), 639-656.
- Stake, R. E. (1995). *The art of case study research*. Thousand Oaks, CA: Sage Publications.
- Strickland, D. A. (1991). Furry therapists boost staff, too. *Medical World News, 32*(1), 47.
- Struk, C. (1998). Fur therapy: A home visitation program for children. *Caring: National Association for Home Care Magazine, 17*(5), 40-43.
- Tamura, T., Yonemitsu, S., Itoh, A., Oikawa, D., Kawakami, A., Higashi, Y., Fujimoto, T., & Nakajia, K. (2004). Is an entertainment robot useful in the care of elderly people with severe dementia. *The Journal of Gerontology, 59A*(1), 83-85.
- Taylor, E., Maser, S., Yee, J., & Gonzalez, S. M. (1993). Effect of animals on eye contact and vocalizations of elderly residents in a long term care facility. *Physical & Occupational Therapy in Geriatrics, 11*(4), 61-71.
- Taylor, S. J., & Bogdan, R. (1998). *Introduction to qualitative research methods: A guidebook and resource* (3rd Ed.). New York, NY: John Wiley & Sons, Inc.

- Triebenbacher, S. L. (1998). Pets as transitional objects: Their role in children's emotional development. *Psychological Reports, 82*, 191-200.
- Trotter, K. S., Chandler, C. K., Goodwin-Bond, D., & Casey, J. (2008). A comparative study of the efficacy of group equine assisted counseling with at-risk children and adolescents. *Journal of Creativity in Mental Health, 3*(3), 254-284.
- Turner, W. G. (2007). The experiences of offenders in a prison canine program. *Federal Probation, 71*(1), 38-43.
- VanFleet, R. (2008). *Play therapy with kids & canines. Benefits for children's developmental and psychosocial health*. Sarasota, FL: Professional Resource Press.
- Velde, B. P., Cipriani, J., & Fisher, G. (2005). Resident and therapist views of animal-assisted therapy: Implications for occupational therapy practice. *Australian Occupational Therapy Journal, 52*, 43-50.
- Walsh, F. (2010). Human-animal bonds II: The role of pets in family systems and family therapy. *Family Process, 48*(4), 481-499.
- Walsh, P. G., Mertin, P. G., Verlander, D. F., & Pollard, C. F. (1995). The effects of a 'pet as therapy' dog on persons with dementia in a psychiatric ward. *Australian Occupational Therapy Journal, 42*, 161-166.
- Walsh, R. N. (1999). *Essential spirituality*. New York: Wiley.
- Wells, M., & Perrine, R. (2001). Critters in the cube farm: Perceived psychological and organizational effects of pets in the workplace. *Journal of Occupational Health Psychology, 6*(1), 81-87.

- Wells, E. S., Rosen, L. W., & Walshaw, S. (1997). Use of feral cats in psychotherapy. *Anthrozoos, 10*(2/3), 125-130.
- Wesley, M. C., Minatrea, N. B., & Watson, J. C. (2009). Animal-assisted therapy in the treatment of substance dependence. *Anthrozoos, 22*(2), 137-148.
- Wilson, C. C., Netting, F., & New, J. (1987). The pet attitude inventory. *Anthrozoos, 1*(3), 76-84.
- Wilson, C. C., & Turner, D. C. (1998). *Companion animals in human health*. London: SAGE Publications.
- Winkle, M. (2008). Using AAT in correction and residential facilities. *OT Practice, 6*, 20-22.
- Wolcott, H. F. (1994). *Transforming qualitative data: Description, analysis, and interpretation*. Thousand Oaks, CA: Sage Publications.
- Wolcott, H. F. (2009). *Writing up qualitative research* (3rd Ed.). Thousand Oaks, CA: Sage Publications.
- Wu, A. S., Niedra, R., Pendergast, L., & McCrindle, B. W. (2002). Acceptability and impact of pet visitation on a pediatric cardiology inpatient unit. *Journal of Pediatric Nursing, 17*(5), 354-362.
- Zasloff, R. L., & Kidd, A. H. (1994). Loneliness and pet ownership among single women. *Psychological Reports, 75*, 747-752.

APPENDIX A
INFORMED CONSENT

Informed Consent for Participation in Research
University of Northern Colorado
Project Title: Process, Perspectives, and Benefits of
Animal Assisted Therapy

Researcher: Laurie Paquette, LPC, Doctoral Candidate, Counseling Psychology, School of Applied Psychology and Counselor Education

Researcher Advisor: Basilia Softas-Nall, Ph.D., Counseling Psychology, School of Applied Psychology and Counselor Education

This research will be researching the mental health and human service professionals' use of animals within their respective fields of expertise. I would like to explore your experiences of using animals when working with clients. I will be asking you questions about your history with animals, current use of animals within your professional practice, and benefits of using animals. Your history with animals will help gain a better understanding of the importance animals hold in your current personal and professional life. The process and procedures used to integrate animals into your therapeutic practice will be explored in detail. The benefits of animals will help other professionals understand how animals can create a positive therapeutic change for their clients. The research purpose is to gain an in-depth understanding of your history with animals, your process of using animals with clients, the benefits of animal assisted therapy to clients, concerns of using animals, and your future goals of using animals in your practice. If you grant permission to participate in this research, you will be asked to participate in the following manner.

Two phone interview sessions will be scheduled with the researcher, lasting no more than 90 minutes each. In the event there are any follow up questions, a third phone interview will be scheduled lasting no more 30 minutes. Each interview will be recorded for the purpose of the study and will not be shared with anyone. No identifying information (i.e. name, address, and phone number) will be given to the research advisors, which will help protect your confidentiality. To further help maintain confidentiality, transcripts of the tapes and any written documentation with your name present will be replaced with numerical identifiers. Your name will not appear in any professional report of this research. The interview recordings and other material with identifiable information will be kept in a locked file cabinet that only the researcher will have access to. The length of each interview will depend on the time taken to answer each question. Although specific questions will be asked about your experiences with animals and animal assisted therapy, you may choose not to answer any questions at any time.

I foresee no risk to you as a participant in this study beyond those that are normally encountered during interviews. Uncomfortable feelings may arise when discussing past animals that hold significant value for you. If this does occur, you may

stop the interview and proceed at a later time, receive referrals to agencies that offer counseling or other supportive services. Please feel free to phone me if you have any questions or concerns about this research, procedures around confidentiality, or any other questions you may have. Please retain a copy of this letter for your records. Thank you for assisting me with my research project.

Sincerely,

Laurie Paquette, LPC
Researcher

Participation is voluntary. You may decide not to participate in this study and if you begin participation you may still decide to stop and withdraw at any time. Your decision will be respected and will not result in loss of psychological benefits to which you are otherwise entitled. Having read the above and having had an opportunity to ask any questions, please sign below if you would like to participate in this research. A copy of this form will be given to you to retain for future reference. If you have any concerns about your selection of treatment as a research participant, please contact the Sponsored Programs and Academic Research Center, Kepner Hall, University of Northern Colorado, Greeley, CO 80639, 970-351-1907.

Participant's Signature

Date

Researcher's Signature

Date

APPENDIX B
DEMOGRAPHIC FORM

DEMOGRAPHIC FORM

Name: _____

DOB: _____

Address: _____

Phone: _____

Ethnicity: _____

Gender: _____

Occupation:

Degrees:

*check all that apply

*list all that

apply

____ Psychologist _____

____ Marriage/Family Therapist _____

____ Social Worker _____

____ Licensed Professional Counselor

____ other (specify: _____)

Number of Years Working in your Occupation: _____

Number of Years having an animal (untrained) be part of your work: _____

Number of Years having an animal (trained for AAT) be part of your work: _____

Please list all animals you have CURRENTLY use as an animal Assisted Therapist:

*If you need additional space, please add on at the end of the form. Thank you

	Animal Name	Age	Animal Type (e.g. dog, cat)	Years as AAT	Animal Trained
1.	_____	_____	_____	_____	Yes No
	Type of Training (e.g. Delta) _____				
2.	_____	_____	_____	_____	Yes No
	Type of Training _____				
3.	_____	_____	_____	_____	Yes No
	Type of Training _____				
4.	_____	_____	_____	_____	Yes No
	Type of Training _____				
5.	_____	_____	_____	_____	Yes No
	Type of Training _____				

Please list all animals you have RETIRED as an animal Assisted Therapist:

1.	_____	_____	_____	_____	Yes No
	Type of Training (e.g. Delta) _____				
2.	_____	_____	_____	_____	Yes No
	Type of Training _____				
3.	_____	_____	_____	_____	Yes No
	Type of Training _____				
4.	_____	_____	_____	_____	Yes No
	Type of Training _____ No				

APPENDIX C

INTERVIEW GUIDE QUESTIONS

Interview Guide Questions

- Q1: What are participants' values and beliefs about animals, past and current?
- Q2: What are participants' perspectives on the benefits of animal assisted therapy?
- Q3: What are the important components of animal assisted therapy?
- Q4: What are the benefits for clients who participate in animal assisted therapy?
- Q5: What will animal assisted therapy look like in the future?

APPENDIX D
INITIAL THEMES

Initial Themes from Interviews

Animal Abuse

Animals Characteristics

Animals Disabilities

Awards for animals

Benefits of AAT

Client Responses to AAT

Death of animal/disruption of AAT

Documentation

Drawbacks of AAT

Emotional safety

Evaluation of AAT

Examples of AAT

Grief/loss

Group Work

Integration

Isolation

Liability

Metaphors

Past history of animals

Professional competence

Rapport built in number of sessions

Research

Response of animals

Safety of animals

Safety of humans

Sexual abuse group

Societal impact

Start of AAT in practice

Stress on animal

Teaching/modeling

Techniques

Termination

Theoretical framework

Therapeutic factors in counseling

Therapist role

Training

Trust

Types of animals

Typical day/procedures

Unconditional positive regard/empathy

Values & beliefs

APPENDIX E
MANUSCRIPT

PROCESS, PERSPECTIVES, AND BENEFITS OF ANIMAL ASSISTED THERAPY

Abstract

In this qualitative study, in-depth semi-structured interviews were conducted to identify the perspectives, values, and beliefs of participants who believe that utilizing animals in therapy provides value to their clients. Each participant was a licensed masters or doctoral level professional who was currently utilizing animals in their therapeutic practice. Two phone interviews were completed and the within-case analysis and cross-case analysis yielded five themes. The themes were animal characteristics, use of metaphors/learning tools, written documentation, therapeutic factors in AAT, and benefits for clients. The findings of this study suggest that participants believe the animals must be well-trained and able to handle client's presenting problems, the animals can be used in a variety of ways in the therapy session, documenting the use of the animal as an intervention is important, and they perceive numerous benefits for their clients.

Keywords: animal-assisted therapy, effectiveness, qualitative, in-depth interviewing

Introduction

Professionals in the mental health/human services field have always looked for new, innovative ways to help clients meet their treatment goals. One such innovative method is the use of animals to help facilitate an empathetic and positive treatment environment. This type of environment may help clients feel safe enough to explore their problems and work towards change. Animals can also be used to increase social skills, understand a person's eating disorders, and decrease anxiety levels.

The human-animal bond is a multifaceted relationship, which plays a crucial role in AAA and AAT. Pets have shown physiological, psychological, and social benefits for different populations (Beck & Katcher, 1996; Cusack, 1988; Cusack & Smith, 1984; Fine, 2006; Wilson & Turner, 1998). A few of the most common physiological benefits of pets are the ability to help their owners recover from illnesses, such as heart disease (Friedmann, Katcher, Lynch, & Thomas, 1980), reduction of blood pressure (Barker, Rasmussen, & Best, 2003), reduction in symptoms of depression, anxiety, and loneliness (Schwartz & Patronek, 2002; Zasloff, & Kidd, 1994), as well as the ability to better cope with cancer (Johnson, Meadows, Haubner, & Sevedge, 2003; Muschel, 1984).

In AAT, the human-animal bond is initially between the professional and their animal (pet). When the professional brings their animal into therapy to use as a tool with clients, the animal is able to provide these same benefits such as empathy and unconditional positive regard to the clients. This is due to the reciprocal relationship between a human and animal (Katcher & Beck, 1983; Levinson, 1972). The human-animal bond is an essential component to help facilitate AAT as an effective intervention

to use in the mental health/human services professions. Without this bond, AAT would not be as effective when working with the various clients and mental health problems.

One of the first documented uses of animals helping sick people was in 1792 when the York Retreat in England used small animals, rabbits, and poultry, to help patients learn skills such as self-control and caring (Schweitzer, Buxbaum, & Rosen, 2000). In 1859, Florence Nightingale wrote about the benefits of animals helping soldiers recuperate from war injuries. In 1944-1945, the Army Air Force Convalescent Center in Pawling, New York documented the first known use of animals in the United States with recovering veterans, who interacted with the animals to help create a diversion from their intensive physical therapy sessions (Wilson, Netting, & New, 1987).

Dr. Boris Levinson, considered by many to be the father of AAT, presented a paper describing “pet therapy” to his colleagues at the 1961 American Psychological Association Conference. Levinson reported accidentally discovering the potential benefits of incorporating pets in therapy when his dog, Jingles, greeted a new client by jumping up and licking the child’s face. Levinson advocated the use of animals to help children who reside in residential facilities and documented the use of his dog in helping them achieve their goals.

The medical field is one of the leading profession in which researchers have studied the impact of using animals with recovering patients. In 1980, Public Health Reports published a study on the one-year survival rate of patients discharged from a coronary care unit, showing that the pet owners’ survival rate was much higher than non-pet owners (Friedmann, Katcher, Lynch, & Thomas, 1980). This remarkable study led the way to investigating the impact of animals with other medical concerns such as

cancer (Johnson, Meadows, Haubner, & Sevedge, 2003), spinal cord injuries (Roberto, 2002), and cerebral palsy (Liptak, 2005). The benefits of using animals have also been documented by occupational therapists (Velde, Cipriani, & Fisher, 2005), as well as hospice workers (Chinner & Dalziel, 1991).

Animal assisted therapy (AAT) has been implemented and documented in a number of different settings. Hospitals, nursing homes, rehabilitation centers, schools, prisons, mental health centers, and residential facilities have welcomed AAT as part of a therapeutic program. Several studies focused on the use of animals in settings such as a dentist's office, and in business environments. Two types of AAT requiring a specific setting due to the nature of the animals are equine facilitated therapy (EFT), and dolphin assisted therapy (DAT). EFT requires the use of horses to help facilitate therapeutic change, and must occur in the horses' environment, such as the stables or pasture. DAT must occur in an oceanarium, an enclosed salt-water environment where the dolphins live.

In 1994, a hospital in California implemented an AAT program for heart-transplant patients called "Canine Candy Striper," where dogs would visit patients who were waiting for a transplant. The program was so successful it expanded to 26 out of 34 of the hospital's inpatient units, thus giving more than 17,000 patients the benefit of canine visits (Roosevelt, 2001). An AAT team, Malayter and Murphy, who regularly visited a hospital in Wisconsin, reported Murphy, a Golden Labrador retriever, had been instrumental in helping a patient accomplish her goal of walking with a walker. "Murphy can get people to do things they don't feel they're able to because their focus is on the

dog” (Peterson, 1999, p. 47). These examples show the numerous benefits of AAT, and the ability to help thousands of people with different illnesses or medical problems.

One study focused on the effectiveness of using caged birds with inpatient adults in a hospital. The researchers reported the birds alleviated some of the depressive symptoms in the older adults; these patients stated the birds were good company, helped them pass the time, increased the number of visitors to their room, and made them happier (Jessen, Cardiello, & Baun, 1996). It appeared dogs and birds were effective in decreasing symptoms of patients in a hospital setting. A study assessed whether or not an AAT group, when compared to other therapy groups, could be effective in attracting participation from the more isolated patients (Holcomb & Meacham, 1989). The researchers found the AAT group was effective in attracting isolated patients, as well as attracting more patients overall in comparison to other therapy groups offered on the ward.

Nursing homes are a widely utilized environment, where the use of AAT and animal assisted activity (AAA) programs are promoted. Most nursing homes do not allow a resident’s pet to come and live in the facility for a variety of different reasons. The bond that an elderly person has with their pet can be very powerful, and sometimes may be the only meaningful relationship they have with another living being. This relinquishing of a treasured pet due to moving into a nursing home can leave the elderly patients grieving for their pet, suffering from depression, and having difficulty adjusting to life without their pet (Sharkin & Knox, 2003).

A common problem with nursing home patients who suffer from Alzheimer’s is the loss of weight due to excessive agitation, which leads to wandering the unit and

having a decreased attention span. A study in a long-term care facility utilized a fish aquarium to help patients stay in the cafeteria area longer, and to sustain their interest in eating more food. The researchers discovered most of the patients increased their food intake to the point that the majority gained a pound or two of weight at the end of the sixteen week study period (Edwards & Beck, 2002). The increase in the food intake helped decrease the amount of nutritional supplements and cost the facility needed in order to provide patients with enough daily caloric intake.

There are many different types of animals that can be used for AAT, with the most popular being dogs and horses. Dolphins are becoming more popular; however, the cost of dolphin-assisted therapy (DAT) can be prohibitive. Other animals that have been used for AAT are cats, rabbits, farm animals (pigs, goats, and cows), llamas, birds, and fish. Each animal has specific behaviors based on their species that may be beneficial for certain types of problems and populations.

Dogs have been the animal of choice involving most research in AAT. Most dogs can be easily trained to obey commands, and are eager to please their owners. Some have an innate ability to understand when a person needs comfort and companionship (Katcher & Beck, 1983). They have been used with children, adolescents, adults, and the elderly. Levinson (1962) discussed in detail the role of the dog to a child, stating the dog is a child's companion, friend, confidante, teammate, and defender. A child feels loved, safe, and non-judged, and receives affection from their dog. Dogs can easily be transported to different settings such as schools, nursing homes, hospitals, day treatment centers, mental health centers, and in-home. They have been documented to be beneficial when working with different types of problems/concerns.

A study explored the use of dogs in a school setting when working with emotionally disturbed children. After 12 weeks of participating in individual AAT sessions, the boys exhibited a remarkable improvement in several areas. They appeared to give fewer negative comments to school personnel, were less distractible during the school day, had improved social relations with their peers, had more eye contact with others, and used a better tone of voice when talking with other (Kogan, Granger, Fitchett, Helmer, & Young, 1999). Children diagnosed with pervasive developmental disorders showed a more playful mood, appeared more focused, and were more aware of their social environment after the presence of a therapy dog (Martin & Farnum, 2002). An adolescent anger management group used two therapy dogs during the group sessions. The adolescents reported the dogs provided them with comfort and support when discussing important issues with other group members (Hanselman, 2001).

In 1967, the first therapeutic riding center was established in the United States, and today there are over 600 riding centers across the U.S. to help facilitate psychological and physical improvements for people of all ages (Kaiser, Spence, Lavergne, & Bosch, 2004). These therapeutic riding centers use horses to help participants reach desired goals or objectives. Recent studies have started to document the effectiveness of equine facilitated therapy (EFT) with children (Roberts, Bradberry, & Williams, 2004), adolescents (Lloyd, 1997), and adults (Kaiser, Spence, Lavergne, & Bosch, 2004). One study focused on the positive effects of EFT on patients with psychiatric disorders such as schizophrenia (Bizub, Joy, & Davidson, 2003, Burgon, 2003), and one study identified the effects of EFT when working with patients who had eating disorders (Christian, 2005).

A residential program for juvenile youth used horses to teach kids how to attach to living beings (Lloyd, 1997). The youth learned to care for the horses during their stay at the residential facility, and in the process developed skills they could take with them when they left. Several youth went on to work in veterinary offices, or other animal related employment sites. A pilot study was conducted to explore the effects of EFT on children's anger, quality of life, and self-competence (Kaiser, Spence, Lavergne, & Bosch, 2004). They found the children's anger significantly decreased after the five days of therapeutic riding, which suggests that children's anger might be addressed using EFT as an intervention.

One of the leading areas of research regarding AAT is individuals with Alzheimer's or dementia. Alzheimer's is one of the fastest growing diseases in the country, and an individual's mental, physical, and emotional decline can occur slowly over a decade, or more rapidly within several years. AAT and Alzheimer's research has focused on different dimensions of the disease, such as agitation (Richeson, 2003), disruptive behaviors (Kanamori et. al., 2001; McCabe, Baun, Speich, & Agrawal, 2002), socialization (Katinas, 2000; Kongable, Buckwalter, & Stolley, 1989), depression (Motomura, Yagi, & Ohyama, 2004), and functioning level (Walsh, Mertin, Verlander, & Pollard, 1995).

Many Alzheimer's/dementia patients become increasingly withdrawn as their disease progresses. The presence of a dog in a nursing home increased socialization among residents by drawing them out of isolative behaviors and orienting them to their reality (based on the days of the week on which the dog visited). Patients who wandered around the facility grounds were able to hold the leash of the dog, and when they got too

far away from staff, the staff was able to call the dog, which in turn brought the patient back within closer proximity of staff (Katsinas, 2000). Another study with similar positive findings, suggested that a dog's presence increased positive social interaction among patients living with Alzheimer's/dementia (Kongable, Buckwalter, & Stolley, 1989). The authors found there was no difference whether the dog was present within a group, or on an individual basis.

Individuals suffering from psychotic disorders, such as schizophrenia and schizoaffective disorder, face unique challenges in trying to remain independent, fully functioning, and productive members of society. Human/health service professionals have started to implement animals into their treatment facilities to help facilitate positive changes for their patients. Several studies have used animals within group treatment (Holcomb & Meacham, 1989, Marr et al., 2000), or during individual treatment (Kovacs, Kis, Rozsa, & Rozsa, 2004), and one facility incorporated animals into the daily living environment of a halfway house for psychiatric patients (Nielsen & Delude, 1994).

Several studies focused on utilizing animals within treatment groups for patients with psychotic disorders. One study looked at the changes in prosocial behaviors of group members after receiving AAT. The authors reported by week four, the participants appeared more sociable, helpful, active, responsive to surrounding environment, and interactive with other participants (Marr et. al., 2000). The researchers and staff at an inpatient hospital ward observed whether the presence of animals would attract the more isolated patients on the unit. They found the isolated patients were drawn to groups when the animal was present, displayed an increase in social interaction with peers, greater verbalizations and expression of feelings, and showed a more positive affect (Holcomb &

Meacham, 1989). These few studies working with psychotic disorders provide an initial look into the benefits of AAT. More research is needed to understand the specific and long-term benefits of AAT.

The use of animals to help with mental health concerns such as depression, anxiety, anger, stress, and trauma are becoming more commonplace. The most widely studied use of AAT is within the adult populations having anxiety and depressive disorders (Barker & Dawson, 1998; Jessen, Cardiello, & Baun, 1996; Lutwack-Bloom, Wijewickrama, & Smith, 2005; Schwartz & Patronek, 2002). There have been a few studies exploring the benefits of AAT working with the child population and specific concerns, such as sexual abuse (Reichert, 1994; Reichert, 1998), conduct disorder (Gullone, 2003), anger management (Hanselman, 2001) and stress levels (Hansen, Messinger, Baun, & Megel, 1999; Nagengast, Baun, Megel, Leibowitz, 1997).

Methods and Procedures

The purpose of qualitative research is to answer “How?” or “What?” questions in a way that presents a detailed picture of a phenomenon, and helps the reader understand how participants make meaning of their experiences. The qualitative approach also provides a way to analyze and interpret the participants’ meaning in a holistic manner (Creswell, 1998; Denzin & Lincoln, 2005; Marshall & Rossman, 1999; Morrow, 2007). The main intent of interviewing is to have a purposeful conversation with participants and obtain specific information on a topic of interest (Merriam, 2009). I used in-depth interviewing to help understand the participants’ perspectives in regard to their history, values, beliefs, and experiences on the use of animals in a therapeutic environment (Taylor & Bogdan, 1998). During in-depth interviews with professionals, information

was collected about their past and current interaction with animals as well as how they utilized the animals in the counseling relationships. Participants also provided their views on the perceived benefits of animal assisted therapy (AAT) for clients, and future implications for AAT in psychology.

The theoretical perspective for this study was constructivism, which is based on the range of perspectives of a human beings experience. Constructivism is viewed as “all knowledge, and therefore all meaningful reality is contingent upon human practices, constructed from the interaction between humans and their world, and developed and transmitted within an essentially social context” (Crotty, 1998, p. 42). This study focused on the constructed realities of the mental health/human services professionals who used animals in their professional practice, and on the meanings they created from these experiences. Within constructivism, there is social constructivism, which involves the social and cultural world in which we live. Each participant was born into a preexisting culture, set in a general and historical context. This study was conducted within the historical context of the 21st century in the United States of America. The USA has specific cultural contexts, which influenced how each participant viewed their world and AAT. A culture is created based on human thought and behaviors, and the culture of a society directs behaviors and organizes experiences (Crotty, 1998). A preexisting culture provides a world of meaning, focusing on many different aspects depending on the humans’ experiences and what they choose to focus on at the time. The participants in this study were focused on utilizing animals within their therapeutic practice as a tool to help their clients achieve treatment goals. There are many beneficial components which

are unidentified regarding AAT. Their meanings are waiting to be discovered, the “truth” being from the perspectives of the participants.

The research goal of this study was to understand the experiences of mental health/human service professionals who used animals in their therapeutic practice. The main areas of exploration regarding each participant’s subjective worldviews on animal assisted therapy were as follows: I explored what their values and beliefs about animals were and how that impacted their utilization of the animals in the therapeutic environment. I gathered information regarding their thoughts, feelings, and beliefs about what it was like to be an animal assisted therapist and how that impacted their professional career. They provided information about the important characteristics needed to facilitate the successful inclusion of animals into their practice, clients’ responses to AAT, and some examples that illustrated the positive effects of utilizing animals in therapy.

For this study purposive nonprobability sampling was conducted based on the rationale of selecting a sample that would help the researcher gain the most understanding and insight (Merriam, 2009). In purposive sampling, I determined several selection criteria that participants had to meet in order to be selected for this study. The minimum requirement for all participants were that each holds a license in their respective field (i.e. psychologist, marriage and family therapist, professional counselor, clinical social worker) and that they used animals in their therapy practice currently, and had done so for a minimum of one year. The participants had to have participated in animal obedience training; animal assisted therapy training, or attended a conference/seminar on animal assisted therapy/intervention. Within purposive sampling,

the participants were selected by network sampling, where each participant was asked to refer other professionals who utilized animals in therapy (Merriam, 1998). Network sampling was the most effective way to enlist enough participants for the study. Due to the participants living in different areas of the country, each participant participated in two phone interviews, lasting between 30 and 60 minutes.

Participants

There were a total of six participants in this study, all of Caucasian origin. There were three licensed psychologists, two males and one female, between the ages of 50 and 60 years old. They had a combined total of 70 years of clinical experience, of which 50 years involved utilizing animals in a therapeutic setting. For the purpose of this study, the licensed psychologists were assigned the names Adam, Katina, and John. They lived in different parts of the United States from the West Coast through the Mid-West. They belonged to a variety of different professional organizations including the American Psychological Association, Delta Society, International Society of Anthrozoology, American Association of Marriage and Family Therapists, and the National Speakers Association.

There were three licensed master level clinicians, all females, between the ages of 45 and 60 years old. Of the licensed master level clinicians, there was a licensed social worker, and two licensed mental health counselors. They had a combined total of 65 years of clinical experience, of which 35 years was in relation to utilizing animals in a therapeutic setting. For the purpose of this study, the licensed master level clinicians were assigned the names Lisa, Jennifer, and Susan. All of the master level clinicians lived in the Southern part of the United States. They belonged to a variety of

professional organizations including the American Psychology Association, American Counseling Association, Equine Assisted Growth and Learning Association (EAGALA), National Association for Social Work, and Therapy Dogs International. The names of all the participants are fictional to ensure confidentiality. There was a combined total of 135 years of clinical experience, 85 of which involved providing animal assisted therapy to clients.

A semi-structured interview guide was developed to help the researcher structure some of the interview and elicit information pertinent to the research question. The interview questions were to be followed as a guide only to help the participants to discuss their process, perspectives, and beliefs about utilizing animals in therapy. The interview questions will be open-ended and participants will be encouraged to share their experiences and thoughts beyond that of the interview protocol. Participants will be encouraged to share their opinions and views (Kvale, 1996).

The research question addressed in this study was:

Q1 What are the processes, perspectives, and beliefs about utilizing animals in a therapeutic environment from mental health/human services professionals?

The following guiding questions were used to direct the data collection processes:

Q1a What are participants' values and beliefs about animals, past and current?

Q1b What are participants' perspectives on the benefits of animal assisted therapy?

Q1c What are the important components of animal assisted therapy?

Q1d What are the benefits for clients who participate in animal assisted therapy?

Q1e What will animal assisted therapy look like in the future?

Data Collection

The phone interviews were in-depth and in semi-structured question format. In-depth interviewing is designed to elicit deep knowledge about the participants' lived experiences, values and decisions, occupational ideology, cultural knowledge, and perspectives (Gubrium & Holstein, 2002). Interviewing allowed the researcher to grasp and articulate the participants' views and perspectives on a specific activity (e.g. AAT). The interviews were semi-structured in format, which allowed the participants to provide information based on their perceptions. The purpose of a semi-structured interview was to be able to explore a list of questions, in any order, and respond accordingly to the answers provided (Merriam, 2009). The flexibility of a semi-structured interview regarding AAT provided themes and experiences for some participants, while other participants provided new insight on their perspective of how AAT was effective. The core questions provided a needed structure, and allowed for a within-case analysis and cross-case analysis as well as interpreting the analysis and providing implications for future practice. A total of six participants (12 interviews) were completed for this study. Saturation was reached when the last interview was analyzed and all of the participants responses could be explained as either a within-case or cross-case example, and was not interpreted as a new emerging theme.

Data Analysis

Analysis of qualitative researcher is an ongoing and continuous process, which begins as soon as the data collection begins. Throughout the data collection process, the researcher formulated questions, recorded thoughts and ideas in the research journal, and made connections between different pieces of information. The analysis was completed

to help the researcher develop a holistic picture of the study and present this picture to others. The case analysis was based on several components; including interviews, member checks, expert checks and researcher journal. A two stage analysis was completed: the within-case analysis and cross-case analysis. Within-case analysis is identified as analyzing the interviews from each participant separate from the others. After the completion of the within-case analysis of the six participants, a cross-case analysis was completed. A cross-case analysis is when the researcher will develop themes that fit for each of the participants but still have variability in the details.

Interview analysis included several major steps. First, each interview was independently coded. Coding was used for the identification of any themes or patterns in that data, which relate to the theory of AAT. Coding of the data was completed with the help of the NVIVO 8 qualitative software. Once the codes were developed, the data were organized into larger categories to identify themes within the data. These themes became the findings of the study. After identifying themes for this study, a member check with each participant and expert check were conducted. Each participant completed a member check by reviewing the themes identified in the study. A psychologist performed an expert check by reviewing the themes identified in the study by the researcher.

Trustworthiness/Rigor

Several steps were implemented to increase trustworthiness for this study: member check, expert check, triangulation, audit trail, thick description, and generalizability. In this study, the internal validity should be high since the data are based on the participants' reality of their experiences and perceptions. This relates to

Merriam's (2009) definition that what the participants reported as the truth is co-created with the researcher's perceptions, interpretation, and analysis of themes.

Trustworthiness or internal validity looks at the question of how the research findings match the participants' reality (Denzin & Lincoln, 2005; Merriam, 2009). In order to increase the trustworthiness of this study several steps were addressed. First is triangulation, which is the ability to analyze the data through more than one source. In this study, the sources were interview transcripts, member and expert checks, researcher journal, within-case analysis, and cross-case analysis. These multiple sources of information provided the study with different ways to analyze and interpret data (Gubrium & Holstein, 2002; Taylor & Bogdan, 1998).

An audit trail was kept during the study, which is a systematically maintained documentation system (Schwandt, 2001). The audit trail contained detailed records of data collection, study procedures, personal contacts, and researcher decision making throughout the study. The audit trail was used to create a timeline for the researcher to cross reference with journal entries and transcripts as themes were emerging. The ability to reference when information was gathered and what the emerging themes were at the time helped provide dependability to the study. In addition to the audit trail, a researcher journal was maintained. The journal was used to keep track of these themes and to analyze the data that are collected.

Within-Case Analysis

The six professionals' values and beliefs about animals were different; a theme for all is the love they have for animals, and their deep understanding of animals' healing power. While growing up, some focused on rescuing strays and injured animals, while

others were content to interact with the family pet or farm animals. Several of them accidentally discovered the benefits of utilizing an animal in a therapy session, while the others were more purposeful in their quest to integrate animals into practice.

Adam is an educator and practitioner who is trying to educate others on the use of animals as a therapeutic intervention, and bridge the gap between research and practice. Katina is also an educator who is mentoring future practitioners in animal assisted therapy, and using her dog in sessions. John is a practitioner who is focused on promoting children and adolescents' well-being. Susan's journey has led her to help create stronger guidelines and ethics for organizations who want to provide equine facilitated therapy services. Lisa and Jennifer are practicing clinicians who use their animals to varying degrees. Lisa's dog is more on the periphery, but creates a warm and inviting atmosphere for her clients. Jennifer uses her horses in every session to structure activities and interventions which help the client work towards achieving their therapy goals.

Animal Temperament

Katina believes that an animal should have certain characteristics/temperament to be an effective addition to the therapy process. "Obviously the skills of being obedient and being really attached to the handler I think is important, just because you need to always have control. You can't always predict what might happen in a session." Besides the basic obedience skills, she believes that an animal needs to be minimally distracting in session, patient, and have a high level of tolerance to client behaviors, such as shouting or being highly emotionally reactive. Some qualities that she thinks are not conducive to

an animal's being effective in therapy are extreme shyness, lack of confidence, and preferring to interact with other dogs and not people.

Having worked with both horses and a dog in therapy sessions, Jennifer believes there are a number of characteristics that are important when conducting animal assisted therapy and equine facilitated therapy. Her main focus is on equine facilitated therapy, and she discusses several key components of this. Jennifer believes that an animal should show unconditional love with the client, and not reject them based on a client's expression of negative emotions. Along with unconditional love, the animal must be free to be themselves and interact in a genuine and real manner. Especially with horses, "they're going to treat you according to how you're acting.... A horse is not going to hold back and so it's going to allow that person to process." This is allowed within reason, as the physical safety of the client and animal are a priority. Several characteristics of an animal that are not beneficial in session include animals that are physically aggressive (biting or horses that kick people). Although many animals are not physically aggressive, there are animals that are "pushy," especially with younger animals that are learning the rules and guidelines of acceptable behaviors. They might push their way around instead of following the therapist's lead.

Susan has worked primarily with horses conducting equine facilitated therapy, but regardless of the type of animal, she feels there are several important characteristics to consider. She believes that an animal should be trained and able to follow the therapist's lead, however, they should "not be trained to the point where they can no longer be themselves." She feels this is an important piece, and that although the animals are under control, they should not lose part of their personality or their freedom to make

independent choices. Allowing the animal the freedom to make choices is relaying a level of respect for the animal.

John has personally trained his therapy dogs for years and besides being adequately trained, he believes they should also be easy going, calm, gentle, loving, intelligent, and intuitive. Animal characteristics that he would find unhelpful, or non-therapeutic, would be animals that are too hyper, overly anxious or fearful, or protective of their owner to the point of being physically aggressive towards the client. He stated that many dogs will bite humans out of fear and there is a “mixture of fear or protectiveness.” John has only used German Shepherds in his therapy practice, and knows that based on their breed characteristics some of them are overly protective and aggressive when identifying a potential threat to self or owner. John recalled one example where a young child was in his office, and during the session got overly excited and jumped on John’s back. Although this was done in a playful and non-aggressive manner, two of his German Shepherds would have perceived that as a threat and bitten the child to protect him. The dog that he does use for therapy did not attack, and looked at his owner for direction. When told it was okay, the dog continued to lie on his bed and wait for instructions.

Metaphors/Tools for Learning

Katina talked about her first therapy dog that had cancer and other physical ailments, and how the clients could see firsthand the changes in the dog, such as shaved patches and stitches. The clients expressed concern about how she was managing her dog’s pain, and Katina used that as a “discussion about how do I manage their pain.” She expanded from the use of the dog as an example to using the dog as a tool for teaching

emotions. She realized “that one of the things that could happen in a very structured setting, especially with people who have been abusive, is teaching empathy.” Teaching empathy, compassion, and other emotion based skills can be a challenging task in a counseling session. Modeling this behavioral interaction, and using the animals as an example to do so, can help a client build these skills.

Lisa used a lot of metaphors, especially when working with all the different animals while conducting the group psychotherapy sessions at the children’s inpatient hospital unit. She would use metaphors between human and animal behavior, and how that related to the children’s situation. Lisa used a lot of metaphors for her group therapy, including the concept of keeping her animals safe from physical harm, and how that relates to keeping the children physically and emotionally safe while they participate in the group session.

Susan frequently uses metaphors in her therapeutic setting with her clients. Although she is only using one horse for the session, there are a dozen horses in the pasture or nearby that create a group dynamic that is conducive to use as metaphors. Since the horses have their own herd dynamics, they are constantly interacting with each other, and giving nonverbal messages to other horses to keep the system working smoothly. She is always looking for how the animal is interacting naturally, even if under specific structured circumstances, and she will use their reactions to help the client understand and learn about appropriate and adaptive behaviors.

Documentation

Adam has focused some of his career in trying to figure out how to bridge the gap between being a researcher and a practitioner. However, the primary goals of a

researcher and a practitioner are very different. These differences have led to difficulties in proving the effectiveness of animal assisted therapy, and a “chasm” of little data to support the efficacy of the intervention. Although the practitioner’s main goal is to provide quality mental health care, they still need to document their sessions to gain insight into where the patient is currently functioning. One of the ways in which Adam does this is to use scales, such as empathy scales or other measures, to document the changes in the client. He cautions that these measures are subjective in nature, and may or may not accurately reflect the efficacy of the intervention. It will be depend on how truthful the clients are being in reporting their perceptions of changes. Lastly, Adam believes that researching animal assisted interventions is different than researching other interventions, and presents unique challenges. One of the ways that we can conduct valid research is by “taking some of the anthropomorphic statements out of our commentaries.” Using the correct terminology for the animal component might help decrease the mystical, and increase accurate reporting. He elaborated by saying that professionals should stop using human labels for their actions or project emotions on the animals, but instead use scientific terms that are evidence based and clearly communicate what the animal is doing at the time.

Similarly to Adam, Katina emphasized the importance of documenting the efficacy of an animal assisted intervention. Katina uses a DAP (data, assessment, plan) progress note to document her therapy sessions. In this format, she would document any significant interactions between the dog and the client(s), and how they relate to the client’s treatment goals. “If it’s going to be an intervention, then let’s be real playful about it, and conscientious about it, and not minimize it...it’s not everything, but it

absolutely is an intervention.” She thinks that one of the challenges with animal assisted therapy not getting as much respect as it should is due to the relationship we have with animals. Until recently, animals have been used for research (as lab rats) for medical advancement. Documenting the effectiveness of the intervention will help it gain more respect in the psychology profession, and decrease the ambivalence that some people express towards it.

Susan and Jennifer practice equine facilitated therapy in their private practices, and both have been trained and certified through EAGALA. EAGALA has a unique way of documenting their interventions that is different than the other organizations in the study. Each session consists of two progress notes, one note for the client and the other for the horse. This helps the practitioners track the horse’s behaviors in a more succinct manner, and is helping facilitate the gathering of data to support the efficacy of the treatment intervention.

Therapeutic Factors

Lisa discussed several therapeutic factors that are important to her in regard to helping clients progress in achieving their therapy goals. In general, she believes that her dog helps “decrease some of the anxiety, and helps them access information, feelings” that might not have been available to them otherwise. Other therapeutic factors that the animal provides are the ability of the client to feel safe and comfortable in the office. There are times when the animal will remind clients of a funny event, and humor can be an opportunity for healing to occur. If the clients own animals, it provides an opportunity for the client and professional to discuss commonalities of pet ownership, as well as share stories.

Susan discussed the importance of having an “unconditional belief that people can have their own answers and can be healthy.” Two key therapeutic factors are genuineness and respect. She values these factors even more than unconditional positive regard, primarily because she believes that you cannot provide unconditional positive regard to every client due to their past history, and your values and beliefs about those events. But you can still work with them effectively. She believes the horses can provide this opportunity to experience unconditional love for the clients because “the horse doesn’t hang on to that history” and pays attention to the client’s actions and emotions instead. A unique therapeutic factor is the ability of the horses to interact with the herd, and model healthy behaviors based on the situation. This is not a typical therapeutic environment, but it gives the clients the opportunity to observe and model the healthy emotional and physical behaviors of the herd. “I think out here the understanding and the cognition is coupled with action and interaction. And then that makes it much easier for the therapy to be generalized out into the person’s life.”

John identified several therapeutic factors that his dog has that are helpful in the therapy relationship. He believes his dog has the ability to show caring and concern for his client’s well-being, and that his presence helps create a sense of informality which in turn makes it easier to relate to one another. An animal’s presence may help decrease the value judgments that clients make about professionals, such as being looked upon as a “scary looking shrink, or a psychologist who is trying to get into their head and make judgments about them.” Further exploration revealed that a dog’s presence might “disarm people” and create feelings of ease and comfort that promote sharing and self-disclosure. John’s ritual of allowing his clients to give his dog treats helps facilitate trust

between the client and professional. Trusting a client with your animal might translate to a different kind of trust between two humans.

Benefits for Clients and Animals

Katina understands that to bring an animal into the session there must be benefits for the clients. She believes that the animal contributes to changes in the environment and creates a home like feeling. Their presence can be a therapeutically powerful tool to help clients deal with their problems. One of the ways she identifies the success of animal assisted therapy is when the client is taking more risks in session, which allows them to be emotionally vulnerable. With this vulnerability comes the emotional and behavioral change for the client. Once she facilitated a therapy session for a group of men who witnessed the death of a co-worker. Initially, they entered the session bewildered by the dogs' presence, and at the end of the session, after experiencing a lot of intense emotions, the men were standing around the dog to get some comfort. She also utilized her dog for an adult survivors group, and the group members benefitted because the dog provided a sense of "physical and emotional safety."

Jennifer identified benefits similar to those mentioned by Katina regarding observing emotional, cognitive, and behavioral shifts in the client during therapy. She believes that you can utilize animals "for any person and any problem. It's just how creative you can be with exercises to address the individual's particular needs." Although clients may be hesitant to interact with horses at first due to fears, they can observe other people interacting positively with the horses, get drawn into the interactions, and start participating. The use of animals in session can "build rapport a lot quicker with clients," and one can observe the clients disclosing personal information a

lot more readily without as much resistance. Jennifer has found that especially when working with children, “they don’t see you as a threat and they just seem to open up and just start talking about anything and everything.”

Like Jennifer, Susan believes that utilizing the horses in therapy can help the therapist pick up on subtle information that the client is presenting in session. You cannot pick up on these subtleties unless you have a solid theoretical foundation and understanding of how to interpret the session, and help facilitate changes for your client. Because animals are nonjudgmental, they can provide the professional with the opportunity to be more objective, and potentially less influenced by their personal biases and beliefs about the client.

Conclusions and Discussion

With an increased acceptance of the use of animals in therapeutic environments, comes more responsibility for organizations and individuals to promote quality education, training, research, and mentoring on utilizing animals in an ethical and effective manner. Currently, there is an abundance of research on animal assisted therapy, much of which has been generated by medical professionals, and through anecdotal stories. Even with an increase in the utilization of animals, and in research and awareness in the general public, there are still gaps in the current body of knowledge. Each professional in this study had their own unique journey into the development of their area of expertise, and to what level and extent they chose to use animals in their profession. This study was designed to investigate one of the gaps on how licensed professionals in the human services/mental health field integrate and document the use of animals into a therapeutic setting. It was designed for the purpose of helping new

psychologists gain a better understanding of how to successfully integrate animals into a therapeutic environment, while continuing to provide a high quality of care to their clients.

The participants believed that there are a number of important characteristics the animals should have in order to be an effective component of the therapeutic relationship. Each participant described these characteristics in a similar way. For example, they believed that the animal should be trained and able to follow the handler's directions, but not trained to the point of losing their individual personality. Animals should have a tolerance for client behaviors such as crying, screaming, and displays of anger. Animals should be able to remove themselves from a potentially harmful situation, but not in a manner that would involve physically attacking the client (i.e. bite, growl). Many of the participants would want their animals to be calm, easy going, loving, nurturing, unconditionally accepting of clients, and intuitive.

Several of the participants have utilized their animal in sessions as a metaphor or tool for learning. Some participants have used the animal to help teach the client about their emotions, such as empathy. The participant could show empathy to the animal, and thus demonstrate to the client what that emotion was, and how to provide it to another living thing. One participant discussed physical and emotional safety with her clients through the use of her animals. Another participant utilized the dynamics of the herd to point out metaphors and learning opportunities to her clients. The horses demonstrated similar non-verbal interactions that might parallel the clients' current struggles or situation.

The participants discussed how they document the use of the animal in their clinical notes. Based on the participants' information, EAGALA trains their professionals to document their sessions on two different clinical notes, one of which is a horse note, and the other a client note. Both of these clinical notes documents what transpired during the session; however the horse note is written by the handler, and describes the horse's responses during the session. The client note describes the session, and that it is an experiential therapy session, but does not necessarily mention the horse or its behaviors. Other participants may document the animal intervention in a DAP (data, assessment, plan) note, or in the intervention section of a clinical note.

The participants in this study identified several therapeutic factors of AAT that they thought were most important. They reported that the animal provides them with the opportunity to interact with the clients in a less formal way, and that the animal acts as a social catalyst. Animals provide clients with the ability to touch and interact with another living being, which can provide it (not sure if "it" refers to the animal or the client) with comfort and support. Professionals can utilize the animal to model behaviors that they desire from their client, such as empathy, compassion, and nurturing. The participants believe that the animal may help them build rapport much quicker with their client than if the animal was not present. Animals react in a genuine and respectful manner towards the clients, depending on how the client is presenting in therapy. For example, a dog might sit closer to a client who is crying and in distress, or might back away into a corner if the client is yelling and agitated. Finally, several participants reported that their animals help the client feel more positive, and less stressed, about the counseling process.

The participants in the study identified a number of benefits for the clients when AAT was part of the therapeutic relationship. Several believed that the clients appeared to be able to take greater risks in session, and were able to explore necessary areas that helped them achieve their treatment goals. Achievement of clients' treatment goals in areas such as emotion, cognition, and behavior were observed by the participants. AAT can help a client feel less isolated and more connected to other living beings and the natural environment.

The majority of the research has shown AAT to have a positive outcome on clients' emotional, cognitive, and behavioral problems/concerns. These positive outcomes can range from minor to statistically significant changes. Marx et al. (2010) found that nursing home residents with dementia were more engaged with others when an animal was present. Although the residents made positive comments about the animal, there were no statistically significant findings. In *Handbook of Animal-Assisted Therapy: Theoretical foundations and guidelines for practice* (2006) there are a number of chapters regarding the benefits of AAT with specific populations, specialized settings, and different mental health problems.

In conclusion, each of the five themes that emerged from this qualitative inquiry has been shown to be present in the current literature. Participants acknowledged core animal characteristics that they felt were necessary to help the therapeutic process. They relied on the use of the animals as a metaphor or learning tool to help their clients gain a deeper understanding of their problems, and to find solutions. They understood the importance of documenting the use of the animal as an intervention in their clinical notes. The participants identified key therapeutic factors of an AAT relationship that have been

identified in other relevant research. Finally, each participant had numerous examples and powerful stories of the benefits their clients received from participating in AAT.

Limitations of Study

A limitation of this study is that the interviews were conducted over the phone instead of in-person. Conducting in-person interviews could have provided the readers with a detailed description of the components and benefits of animals assisted therapy. A detailed description could have been written about the therapeutic environment; such as the ambiance of the environment, professionals mannerisms and interactions with others, and the animal(s) interactions with the handler and interviewer. Additionally, the lack of the client's perspectives regarding the benefits or limitations of animal assisted therapy is a limitation of this study. Interviewing the client's regarding their perspectives on the benefits and limitations of animal assisted therapy could provide the reader with a rich description and in-depth understanding of these benefits of utilizing animals to help clients achieve treatment goals and moving towards healing. Both of these additions would have provided the readers with a thick description and more examples of the beneficial components of AAT.

Another limitation of the study was a limited ability to provide a thick description. This was due to the fact that the participants were interviewed by phone only. There was no in person contact, and therefore the researcher could not describe the participants, or the therapeutic environment in which they worked. The descriptions came from the participants themselves, and from their accounts of the therapeutic benefits of AAT.

A final limitation is the inability of future researchers to replicate the study. This is due to the fact that it was a semi-structured, in-depth interview; therefore, follow up

questions were dependent on answers the participants provided during the interview process. Each participant answered the questions based on their thoughts, perspectives, and beliefs at that moment in time. Since their perspectives are always changing as they experience new things, a researcher trying to replicate the study could not reproduce the moment in time when this study was conducted, analyzed, and interpreted.

Implications for Future Research

Due to the exploratory nature of the current study, further research is needed to continue to gain a deeper understanding of how professionals utilize animals in a therapeutic relationship. This should include how professionals document the effectiveness of the intervention, and with which populations, or mental health issues, the intervention appears to be effective. Although there are hundreds of articles, and dozens of books, written about the benefits of the human-animal bond and the effectiveness of AAT, much of the research is based on anecdotal stories, or studies conducted in a tightly controlled setting (hospital or nursing home). The research is still lacking on how mental health/human services professionals integrate animals into their private practice, and how animals are used in community outpatient settings. Furthermore, the research has not yet investigated in detail the perspectives of these professionals. This study was an initial attempt to do so.

The results of this study suggest several things. First, professionals in the mental health/human services field need to utilize a certification program which trains professionals on how to integrate animals into a therapeutic setting. This training program would include requirements beyond the obedience and temperament test that organizations currently offer professionals. Delta society offers trainings on becoming a

Pet Partner; however, only 24 of the 50 states have trainings available. In Florida only one training was available during a 30 day period. There needs to be more availability of training courses and certifications for professionals interested in starting their own AAT practice. Without access to knowledgeable instructors, professionals will continue to venture out on their own, and may not get the appropriate training needed to implement the intervention accurately and effectively. Inappropriate or ineffective training could impact the therapeutic relationship and decrease the effectiveness the animal may have in helping the client's achieve their goals. This decrease in effectiveness may impact the way that clients and the community view animal assisted therapy, and portray a more negative view of the intervention.

Second, the six participants that I interviewed varied in the ways they documented the effectiveness of the intervention. EAGALA has developed a clinical note on the effectiveness of the intervention that is standardized, purposeful, and suitable for submission to the organization. Other organizations, such as Delta Society, or APA, Division 17, Section 13, need to develop a standardized clinical note similar to EAGALA's, and start to collect data on the effectiveness of AAT interventions with other animals. If organizations are soliciting clinical notes, or documentation, to support the effectiveness of AAT when treating a specific mental health problem, they may be able to collect a significant amount of data to demonstrate specific components of its effectiveness. Part of determining the effectiveness of the AAT intervention would be to utilize standardized assessments that measure a specific problem (e.g., the BECK Depression Inventory, the Child Behavior Checklist) at the initial session and the termination session. Utilizing standardized assessment will help increase the validity and

reliability of the AAT intervention. There are a number of variables that can be measured regarding AAT and its effectiveness in working with clients of all ages, therapeutic settings, and mental health concerns. Future studies could also focus on the impact of having an animal present and how it may change the mental health professionals' perspectives and interventions when working with clients. Exploration of all of these different variables is an important next step in moving AAT into a valid therapeutic intervention.

Third, professional organizations such as American Psychological Association, and the American Counseling Association, need to develop and offer trainings regarding AAT to professionals which meet the requirements for continuing education credits based on state licensures. Currently, there are multiple non-for-profit organizations that offer training for animal assisted activity and volunteer work. There is not one main organization which is affiliated with a psychology organization that offers training to professionals strictly for AAT purposes. Although Section 13 was recently started to promote the dissemination of information to professionals regarding different topics of interest, they do not focus on the actual training of the animals themselves. These trainings should offer professionals an opportunity to understand the benefits of AAT, the implementation of AAT in a variety of settings, with different populations, and for different mental health problems. The trainings should enhance a professional's knowledge and expertise so they can implement these skills into their therapeutic environments. For professionals who utilize animals on a regular basis in their therapeutic practice, it is important that they receive training and education on the most effective and beneficial AAT interventions. Another component of the professional

training is to offer a yearly conference dedicated to AAT and promoting continuing education, training, therapeutic interventions, appropriate documentation, and ability to participate in research projects regarding effectiveness of the intervention.

Fourth, future research in AAT needs to move away from anecdotal stories toward identifying and utilizing a more evidenced based approach. Using an evidenced based approach to AAT will help increase the credibility of the intervention in the field of psychology. It will also help to identify key components of the intervention to others on why the intervention is as effective as it is. Although many books and articles have been written about the human animal bond, there is still a large component of the relationship that has yet to be defined. If professionals can continue to pinpoint the pieces of the relationship that are effective in treating mental health problems, the intervention can move towards being a respected and valued practice, and away from being just a “feel good” experience. One way that researchers and professionals can attempt to define what components of animal assisted therapy appear to be effective is to solicit information from the clients who receive these services. This can be accomplished through client surveys that ask specific questions which target areas of AAT that researchers might be trying to identify as key components of its success.

Part of identifying the key components of the intervention as stated above would be to identify the different levels of the AAT intervention. As evidenced by the participants in the study, each one of them utilized the animal(s) to varying degrees. One participant utilized her animal to provide a warm and inviting environment but did not use her dog as a specific and planned intervention or address a treatment goal. The other participants utilized their animals to varying degrees; some of them used the animal for

some of their interventions, while others used their animals for almost all or every intervention. The purpose, rationale, and decision making of when and how professionals utilize their animals is an important component to explore further. Exploring the professionals decision making on the integration of their animal could help other professionals gain a better understanding of how to integrate their animals and for what purpose or intervention to do so.

Fifth, there are a number of different names for AAT that professionals use interchangeably, such as animal assisted psychotherapy, pet therapy, pet facilitated therapy, equine facilitated psychotherapy, equine therapy, and dolphin assisted therapy. Although there are many different names that can be used to describe AAT, it is not a therapy in itself; therefore, professionals should use the term “animal intervention” or “animal assisted intervention.” Several of the participants in this study stated they utilize the animals as an adjunct in their therapy, and that the animal is not the only intervention or strategy that they use with the clients. They do not believe that AAT is an entity on its own, but rather interventions that can enhance the therapeutic relationship and help the client achieve their goals.

Sixth, organizations which offer mental human/human service professionals’ liability insurance need to provide insurance for AAT interventions. Currently, organizations such as Delta Society and Therapy Dogs International may offer professionals liability insurance; however, organizations such as American Psychological Association or American Counseling Association do not. Since, AAT is an intervention that requires the use of another living being (e.g., dog, horse, cat) it is important that professionals are able to purchase a comprehensive insurance coverage that will meet the

needs of their practice. This coverage can provide the mental health professional with the knowledge and security that if anything negative were to occur (e.g., client being bit, kicked) that they could be covered for monetary damages and well as receive legal representation. Since, AAT is dealing with a live animal, it would be important to have this be a separate section in their liability insurance to ensure that it is covered and the coverage is explained in full detail.

References

- Barker, S. B., & Dawson, K. S. (1998). The effects of animal-assisted therapy on anxiety ratings of hospitalized psychiatric patients. *Psychiatric Services, 49*, 797-801.
- Barker, S.B., Rasmussen, K. G., & Best, A. M. (2003). Effect of aquariums on electroconvulsive therapy patients. *Anthrozoos, 16*(3), 229-240.
- Beck, A., & Katcher, A. (1996). *Between pets and people: The importance of animal companionship* (Rev.Ed.). West Lafayette, IN: University Press.
- Bizub, A. L., Joy, A., & Davidson, L. (2003). "It's like being in another world": Demonstrating the benefits of therapeutic horseback riding for individuals with psychiatric disability. *Psychiatric Rehabilitation Journal, 26*(4), 377-384..
- Chinner, T. L., & Dalziel, F. R. (1991). An explorative study on the viability and efficacy of a pet-facilitated therapy project within a hospice. *Journal of Palliative Care, 7*, 13-20.
- Christian, J. E. (2005). All creatures great and small: Utilizing equine-assisted therapy to treat eating disorders. *Journal of Psychology and Christianity, 24*(1), 65-67.
- Creswell, J. W. (1998). *Qualitative inquiry and research design: Choosing among five traditions*. Thousand Oaks, CA: Sage Publications.

- Crotty, M. (1998). *The foundations of social research: Meaning and perspective in the research process*. Thousand Oaks, CA: Sage Publications.
- Cusack, O. (1988). *Pets and mental health*. New York: The Haworth Press.
- Cusack, O., & Smith, E. (1984). *Pets and the elderly: The therapeutic bond*. New York: The Haworth Press.
- Denzin, N. K., & Lincoln, Y. S. (2005). *The Sage handbook of qualitative research* (3rd Ed.). Thousand Oaks, CA: Sage Publications.
- Edwards, N. E., & Beck, A. M. (2002). Animal-assisted therapy and the nutrition in Alzheimer's disease. *Western Journal of Nursing Research*, 24(6), 697-712.
- Fine, A. (Ed.). (2006). *Handbook on animal-assisted therapy: Theoretical foundations and guidelines for practice* (2nd Ed.). San Diego, CA: Academic Press.
- Friedmann, E., Katcher, A. H., Lynch, J., & Thomas, S. (1980). Animal companions and one-year survival of patients discharged from a coronary care unit. *Public Health Reports*, 95, 307-312.
- Gubrium, J. F., & Holstein, J. A. (Eds.). (2002). *Handbook of interviewing research*. Thousand Oaks, CA: Sage Publications.
- Gullone, E. (2003). The proposed benefits of incorporating non-human animals into preventative efforts for conduct disorder. *Anthrozoos*, 16(2), 160-174.
- Hanselman, J. L. (2001). Coping skills interventions with adolescents in anger management using animals in therapy. *Journal of Child and Adolescent Group Therapy*, 11(4), 159-195.
- Hansen, K. M., Messinger, C. J., Baun, M. M., & Megel, M. (1999). Companion animals alleviating distress in children. *Anthrozoos*, 12(3), 142-148.

- Holcomb, R. & Meacham, M. (1989). Effectiveness of an animal-assisted therapy program in an inpatient psychiatric unit. *Anthrozoos*, 2(4), 259-264.
- Jessen, J., Cardiello, F., & Baun, M. M. (1996). Avian companionship in alleviation of depression, loneliness, and low morale of older adults in skilled rehabilitation units. *Psychological Reports*, 78, 339-348.
- Johnson, R. A., Meadows, R. L., Haubner, J. S., & Sevedge, K. (2003). Human-animal interaction: A complementary/alternative medical (CAM) intervention for cancer patients. *American Behavioral Scientist*, 47(1), 55-69.
- Kaiser, L., Spence, L. J., Lavergne, A. G., & Bosch, K. L. (2004). Can a week of therapeutic riding make a difference?-A pilot study. *Anthrozoos*, 17(1), 63-72.
- Kanamori, M., Suzuki, M., Yamamoto, K., Kanda, M., Matusui, Y., Kojima, E., Fukawa, H., Sugita, T., & Oshiro, H. (2001). A day care program and evaluation of animal-assisted therapy (AAT) for the elderly with senile dementia. *American Journal of Alzheimer's Disease and other Dementias*, 16(4), 234-239.
- Katcher, A. H., & Beck., A. M. (1983). *New perspectives on our lives with companion animals*. Philadelphia, PA: University of Pennsylvania Press.
- Katsinas, R. P. (2000). The use and implications of a canine companion in a therapeutic day program for nursing home residents with dementia. *Activities, Adaptation & Aging*, 25(1), 13-29.
- Kogan, L. R., Granger, B. P., Fitchett, J. A., Helmer, K. A., & Young, K. J. (1999). The human-animal team approach for children with emotional disorders: Two case studies. *Child & Youth Care Forum*, 28(2), 105-121.

- Kongable, L. G., Buckwalter, K. C., & Stolley, J. M. (1989). The effect of pet therapy on the social behavior of institutionalized Alzheimer's clients. *Archives of Psychiatric Nursing, 3*(4), 191-198.
- Kovacs, Z., Kis, R., Rozsa, S., & Rozsa, L. (2004). Animal-assisted therapy for middle-aged schizophrenic patients living in a social institution. A pilot study. *Clinical Rehabilitation, 18*, 483-486.
- Kvale, S. (1996). *Interviews: An introduction to qualitative research interviewing*. Thousand Oaks, CA: Sage Publications.
- Levinson, B. (1962). The dog as a "co-therapist." *Mental Hygiene, 46*, 59-65.
- Levinson, B. M. (1972). *Pets and human development*. Springfield, IL: Charles C. Thomas Publishers, LTD.
- Liptak, G. S. (2005). Complementary and alternative therapies for cerebral palsy. *Mental Retardation and Developmental Disabilities Research Review, 11*(2), 156-163.
- Lloyd, J. (1997). Hard work on a ranch for young offenders. *Christian Science Monitor, 88*(170), 10.
- Lutwack-Bloom, P., Wijewickrama, R., & Smith, B. (2005). Effects of pets versus people visits with nursing home residents. *Journal of Gerontological Social Work, 44*(3/4), 137-159
- Marr, C. A., French, L., Thompson, D., Drum, L., Greening, G., Mormon, J., Henderson, I., & Hughes, C. W. (2000). Animal-assisted therapy in psychiatric rehabilitation. *Anthrozoos, 13*(1), 43-47.

- Marshall, C., & Rossman, G. B. (1999). *Designing qualitative research* (3rd Ed.). Thousand Oaks, CA: Sage Publications.
- Martin, F., & Farnum, J. (2002). Animal-assisted therapy for children with pervasive developmental disorders. *Western Journal of Nursing Research*, 24(6), 657-670.
- Marx, M. S., Cohen-Mansfield, J., Regier, N. G., Dakheel-Ali, M., Srihari, A., & Thein, K. (2010). The impact of different dog-related stimuli on engagement of persons with dementia. *American Journal of Alzheimer's Disease & Other Dementias*, 25(1), 37-45.
- McCabe, B. W., Baun, M. M., Speich, D., & Agrawal, S. (2002). Resident dog in the Alzheimer's special care unit. *Western Journal of Nursing Research*, 24(6), 684-696.
- Merriam, S. B. (1998). *Qualitative research and case study applications in education*. San Francisco, CA: Jossey-Bass Publishers.
- Merriam, S. B. (2009). *Qualitative research: A guide to design and implementation*. San Francisco, CA: Jossey-Bass Publishers.
- Morrow, S. L. (2007). Qualitative research in counseling psychology: Conceptual foundations. *The Counseling Psychologist*, 35(2), 209-235.
- Motomura, N., Yagi, T., & Ohyama, H. (2004). AAT for people with dementia. *Psychogeriatrics*, 4, 40-42.
- Muschel, I. J. (1984). Pet therapy with terminal cancer patients. *The Journal of Contemporary Social Work*, 451-458.

- Nagengast, S. L., Baun, M. N., Megel, M., & Leibowitz, J. M. (1997). The effects of the presence of a companion animal on physiological arousal and behavioral distress in children during a physical examination. *Journal of Pediatric Nursing, 12*(6), 323-330.
- Nielsen, J. A., & Delude, L. A. (1994). Pets as adjunct therapists in a residence for former psychiatric patients. *Anthrozoos, 7*(3), 166-171.
- Petition to establish a section on human-animal studies in Division 17, Society of Counseling Psychology. (2006, Fall). *American Psychological Association, Society of Counseling Psychology Newsletter, 20*.
- Peterson, L. (1999). How puppy love is therapeutic: The miracle of Murphy. *Biography Magazine, 44-47, 110-111*.
- Reichert, E. (1994). Play and animal assisted therapy: A group treatment model for sexually abused girls ages 9-13. *Family Therapy, 21, 55-62*.
- Reichert, E. (1998). Individual counseling for sexually abused children: A role for animals and storytelling. *Child and Adolescent Social Work Journal, 15*(3), 177-185.
- Richeson, N. E. (2003). Effects of animal-assisted therapy on agitated behaviors and social interactions of older adults with dementia. *American Journal of Alzheimer's Disease and Other Dementias, 18*(6), 353-358.
- Roberto, M. (2002). Animal-assisted therapy: A modality of treatment for the patient with spinal cord injury. *SCINursing, 19*(3), 142-143.
- Roberts, F., Bradberry, J., & Williams, C. (2004). Equine-facilitated psychotherapy benefits students and children. *Holistic Nursing Practice, 32-35*.

- Roosevelt, M. (2001, August, 6). Canine candy stripers. *Time*, 158(5), 52-54.
- Schwandt, T. A. (2001). *Dictionary of qualitative inquiry* (2nd Ed.). Thousand Oaks, CA: Sage Publications.
- Schwartz, A., & Patronek, G. (2002). Methodological issues in studying the anxiety-reducing effects of animals: Reflections from a pediatric dental study. *Anthrozoos*, 15(4), 290-298.
- Schweitzer, A., Buxbaum, M., & Rosen, M. (2000). Animal-assisted therapy. In K. L. Fontaine (Ed.), *Complementary and alternative therapies for nursing practice* (2nd Ed.; pp. 443-462). New Jersey: Pearson Prentice Hall.
- Sharkin, B. S., & Knox, D. (2003). Pet loss: Issues and implications for the psychologist. *Professional Psychology: Research and Practice*, 34(4), 414-421.
- Taylor, S. J., & Bogdan, R. (1998). *Introduction to qualitative research methods: A guidebook and resource* (3rd Ed.). New York, NY: John Wiley & Sons, Inc.
- Velde, B. P., Cipriani, J., & Fisher, G. (2005). Resident and therapist views of animal-assisted therapy: Implications for occupational therapy practice. *Australian Occupational Therapy Journal*, 52, 43-50.
- Walsh, P. G., Mertin, P. G., Verlander, D. F., & Pollard, C. F. (1995). The effects of a 'pet as therapy' dog on persons with dementia in a psychiatric ward. *Australian Occupational Therapy Journal*, 42, 161-166.
- Wilson, C. C., Netting, F., & New, J. (1987). The pet attitude inventory. *Anthrozoos*, 1(3), 76-84.
- Wilson, C. C., & Turner, D. C. (1998). *Companion animals in human health*. London: SAGE Publications.

Zasloff, R. L., & Kidd, A. H. (1994). Loneliness and pet ownership among single women, *Psychological Reports*, 75, 747-752.